

Class 29—Electromagnetic Contact Devices

CLASS 29
ELECTROMAGNETIC CONTACT DEVICES

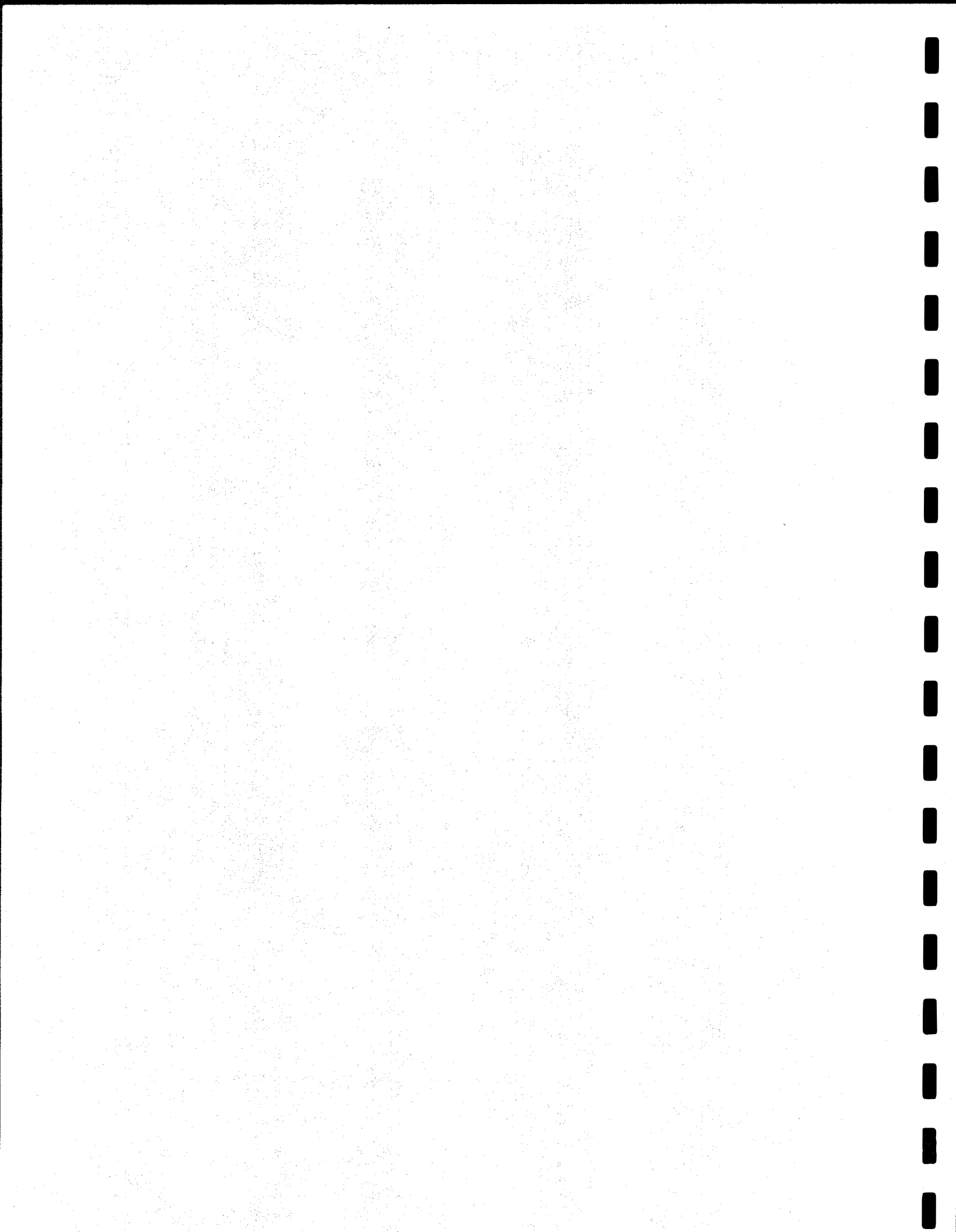
(ALL TYPES)

INCLUDES: RELAYS & CIRCUIT BREAKERS

NOTE: SOLENOIDS COVERED BY CLASS 30

RESTRICTED

NAVSHIPS 900,109



Class 29—Electromagnetic Contact Devices

3.29-1

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION		
CAU 29000	* SEE BELOW		CRR 29007	QQ		CSD 29013	MISC. SOUND			
RELAY			RELAY-ANTENNA BAND CHANGE			RELAY				
DOUBLE POLE SINGLE THROW, NORMALLY CLOSED OPERATING COILS #1 & 2 TO BE 800 OHMS ± 10% (20 VOLT, 0.025 AMP) ENERGIZING COIL TO MATCH WITH THOSE OF OTHER TYPE -29000 RELAYS WITHIN ± 10% - APPROX.			4 PDT 8-14 V. D.C. COIL.			115 V., 60 CYCLE COIL WITH 2000 OHM TYPE AB RESISTOR DPST NORMALLY CLOSED, CONTACT RATING 1 AMP DC.				
* (UA-1) CRV-35000.										
10/8/37 PEL		CRV:KX-284035	1/11/38	AE 6760	AE 6760	3/3/38	CXA 1848	CBM:746-12		
NOV. 41		REV. 0	NOV. 41			NOV. 41	CBM:746-12			
(20 VOLTS 0.03 AMPS.)		29000								
			CRR 29008	* SEE BELOW	55RE29J1001A	CSD 29014	MISC. SOUND			
			KEYING RELAY ASSEMBLY			RELAY				
			INCLUDES A 29042 RELAY AND A 48881 COMPENSATING CAPACITOR WITH A - 63349E SERIES RESISTOR.			110 V., 60 CYCLE COIL. DPST SB NORMALLY OPEN CONTACT RATING 1 AMP DC.				
			* QC-1a & QC-1b (IMP)							
			2/16/38	773A	CBM:DWG773A	3/3/38	CS 1730	CBM:746-10		
			NOV. 41			NOV. 41	CBM:746-23			
CM-29001	QQ		CSD 29009	MISC. SOUND		CSD 29015	MISC. SOUND			
RELAY			RELAY			RELAY				
SPDT - 8 TO 14 VOLT DC COIL.			110 V., 60 CYCLE COIL. SPDT-DB CONTACT RATING 1 AMP. DC.			110 V., 60 CYCLE COIL. DPDT SB CONTACT RATING 1 AMP DC.				
10/30/37	E-337	CRR:B7517	3/3/38	CXA-1898		3/3/38	CS1729	CBM:746-10		
NOV. 41			NOV. 41	(CBM TYPE 746-3)(CBM) 746-3		NOV. 41	CBM:746-43			
CLR 29002	QQ		CSD 29010	MISC. SOUND		CSD 29016	MISC. SOUND			
RELAY			RELAY			RELAY				
OPST SINGLE BREAK NORMALLY OPEN WITH JUMPER FOR OPERATION AS A SPST DOUBLE BREAK NORMALLY OPEN. 8 TO 14 VOLTS DC CONTACTS RATED AT 15 AMP, 6 VOLTS OR 5 AMP 115 VOLTS. CURRENT FOR NORMAL OPERATION IS 0.17 AMP AT 12 VOLTS.			6 V., 60 CYCLE COIL. SPST-DB NORMALLY OPEN CONTACT RATING 1 AMP DC.			110 V., 60 CYCLE COIL. DPST NORMALLY CLOSED CONTACT RATING 1/4 AMP DC.				
10/30/37	1204	CRR:B4894	3/3/38	CX 1898	(CBM) 746-3	3/3/38	CX 1848	CBM:746-10		
NOV. 41			NOV. 41	(CBM TYPE 746-4)		NOV. 41	CBM:746-57			
CSP 29003	MISC. SOUND		CSD-29010-A	MCA		CRV 29017	CRV-50064			
RELAY PANEL			RELAY, MIDGET			RECEIVER INPUT ATTENUATOR UNIT				
CONSISTS OF 4 RELAYS FOR 115 V. AC OPERATION WITH CONTACT OF ONE FOR 115 V. A.C., 0.3 A. OF OTHER THREE FOR 440 V. A.C., 5.0 AMPS. AND 1 TIME DELAY SWITCH.			SPDT DB. NORMALLY OPEN. CONTACTS RATED 1 AMP 110V. COIL RATED 6 VOLTS, 60 CYCLES, 300 TURNS #25 WIRE, 1.8 OHMS DC RESISTANCE. ARMATURE OPEN 1.52 AMPS., CLOSED. 76 AMPS. SAME AS -29010 EXCEPT FOR AUX1-00LD CSD CX1-1898. CBM TYPE 746-3A			RELAY CONTROL WITH ADJUSTABLE ATTENUATION. FREQUENCY RANGE 175 TO 600 KC & 2000 TO 18,100 KC.				
1/5/38	TD-284	CBM:SK2839	4/10/45	1XHX103	CBM:746-4A	3/25/38		M-418073		
NOV. 41	CBM TYPE 746-53		JUN. 45	COIL: "3A" Ø		NOV. 41		REV 0		
CSD 29004	MISC. SOUND		CSD-29010-A			CRY 29018	CRV-50064			
RELAY - TIME DELAY			LIARY ARM & BAR IN MOVING CONTACT & HYCALEX INSULATION.			RELAY				
115 V. 60 CY. COIL, SPST SB NORMALLY OPEN.						DPST SB NORMALLY OPEN. 10 TO 14 V. DC COIL, MAX CURRENT 75 MA.				
1/6/38	TD-97	CBM:746-40								
NOV. 41	CBM:746-40					4/5/38	C	CRV:K-843337-1		
CSD 29005	MISC. SOUND		CSD 29011	MISC. SOUND		NOV. 41		REV. 4		
RELAY			RELAY			CLR 29019	QQ			
115 V. 60 CY. COIL SP-ST-DB NORMALLY OPEN CONTACT RATING 1 AMP. D.C.			6 V., 60 CYCLE COIL. DPST SB NORMALLY OPEN CONTACT RATING 1 AMP. DC.			RELAY				
						2 POLE, 2 THROW SINGLE BREAK: 2 POLE, SINGLE THROW, SINGLE BREAK, NORMALLY OPEN 10 TO 12 V. DC COIL. 0.18 AMP., 67 OHMS.				
*(CBM TYPE 746-41)										
1/6/38	ABTXIP	CBM:746-12	3/3/38	CS 1730	CBM 746-10	4/9/38	1486RYMX	CRR:QB-8416		
NOV. 41	*SEE ABOVE		NOV. 41	CBM TYPE 746-10		NOV. 41	COIL #3540			
CSD 29006	MISC. SOUND		CSD 29012	MISC. SOUND		CDR 29020	QQ			
RELAY			RELAY			RELAY				
115 V. 60 CY COIL 4 PST SB NORMALLY OPEN CONTACT RATING 4 AMPS. D.C.			6 VOLTS, 60 CYCLE COIL. DPST SB NORMALLY CLOSED CONTACT RATING 1/4 AMP DC.			RATED 50 AMPERES - 15 VOLTS - COIL: 11.5 OHMS AT 20°C, 1.23 AMP., 14 V. DC SPST NO				
*(CBM TYPE 746-58)			3/3/38	CX 1848	CBM:746-10	4/12/38	EX-19374	CRR:QB-6195		
1/6/38	AF8F 8	CBM:746-58	NOV. 41	CBM:746-11		NOV. 41				
NOV. 41	*SEE ABOVE									
			ASSIGNED			ASSIGNED				
DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER

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NAVSHIPS 900,109

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CRR 29021	LD-4		CBN 29028	* SEE BELOW	55RE29J1002A	CSZ 29035	TBK-8	
RELAY LESS COVER			KEYING RELAY ASSEMBLY			OVERLOAD RELAY		
SPST SB NO; 110 V. DC COIL 8 MA DC.			INCLUDES A -29026 RELAY WITH A TYPE			SPST SB, NORMALLY CLOSED. CONTACTS RATED		
CONTACT RATING 4 AMPS (300 WATTS)			- 63679E SERIES RESISTOR AND A -48881			AT 0.4 AMP AT 230 V. DC, 1 AMP AT 115 V.		
			COMPENSATING CAPACITOR WITH A -63349E			DC, 5 AMP AT 110 V. AC. MAX. TRIPPING		
			SERIES RESISTOR.			VALUE IS 0.62 A., MIN. VALUE 0.31 AMP.		
						COIL RESISTANCE 22 OHMS. OIL DASHPOT		
4/28/38 (CAU) RA 30		CRR:AC55273 A &	* QBA, QBA-1 & QBB.			WITH "MEMCO C" OIL. NAVY TYPE 9045 OIL		
NOV. 41 MODIFIED		C-553688	10/4/38 773B		CBM:DMG 773B	11/14/38 CLASS 9055		CRV:K-860232-3
			NOV. 41			NOV. 41 EQ 474		REV 0
CAU 29022	GENERAL USE		CSD 29029	* SEE BELOW		CSZ 29036	TBK-8	
RELAY			RELAY			OVERLOAD RELAY		
SPECIAL FOR USE IN TYPE - 29017 RECEIVER			3P-ST-SB-NO; COIL RATED: 115 VOLT 60			SPST SB, NORMALLY CLOSED. CONTACTS RATED		
INPUT ATTENUATOR UNIT - 12 V. DC COIL-			CY.; CONTACTS RATED: 110 VOLTS - 30 AMPS			AT 0.4 AMP AT 230 V. DC, 1 AMP AT 115 V.		
100 OHMS DC RESISTANCE.			AC, 4 AMPS DC. 220 VOLTS - 25 AMPS AC, 2			DC, 5 AMP AT 110 V. AC. MAXIMUM TRIPPING		
			AMPS DC.			VALUE IS 0.34 AMP. MINIMUM VALUE IS 0.17		
						A. COIL RESISTANCE 60 OHMS. OIL DASHPOT		
5/3/38 ZQA		CRV:M-418060-	* CBM-52095 (QCH)			WITH "MEMCO C" OIL. (NAVY TYPE 9045 OIL)		
NOV. 41 D282377 COIL		501 REV. 2	10/10/38 ATDB8		CBM:746-62	11/14/38 CLASS 9055		CRV:K-860232-4
			NOV. 41 CBM:746-62			NOV. 41 EQ 475		REV. 0
CBN 29023	* SEE BELOW	55RE29J1000A	CSD 29030	* SEE BELOW		CSZ 29037	* SEE BELOW	
KEYING RELAY ASSEMBLY			RELAY			RELAY		
INCLUDES A - 29026 RELAY AND A - 48881			SPST DB NORMALLY OPEN; 110 VOLT 60 CY.			DPST SB NORMALLY OPEN. CONTACTS RATED AT		
COMPENSATING CAPACITOR WITH A - 63349E			COIL. CONTACTS RATED 1 AMP DC.			6 AMP 110 V. DC, 3 AMP 220 V. DC OR 15		
SERIES RESISTOR.						AMP 220 VOLTS AC. MAXIMUM COIL RATING IS		
						85 MA AT 121 V. AC. MINIMUM IS 67 MA		
* QCA, QCB, QCC, -1, QCE, QCF-1.			* CBM-52094 (NM-10)			Ø COIL 1267-S1-W33.		
6/7/38 773		CBM:DMG 773	10/10/38 CX 1898		CBM:746-3	* TBK-8, 10 & TBL-4.		
NOV. 41			NOV. 41 CBM:746-66			11/14/38 CLASS 8511;		CRV:K-860238-2
						NOV. 41 Ø SEE ABOVE		REV. 5
CBN 29023-A	* SEE BELOW	55RE29J1003A	CSD 29031	* SEE BELOW		AT 93 V. AC.		29037
KEYING RELAY ASSEMBLY			RELAY					
SAME AS NAVY TYPE CBM-29023 EXCEPT FOR			3P-ST-SB-NO; COIL RATED: 115 V. 60 CYS.;					
ADDITION OF COUPLING RESISTORS.			CONTACTS RATED: 110 VOLTS; 30 AMPS AC, 4					
			AMPS DC; 220 V., 25 AMPS AC; 2 AMPS DC;					
			WITH (2) BLOW OUT CONTACTS FOR 75 VOLTS,					
			7.5 AMPS.					
* QCA1, QCB-2, 3 & QCE-2, 3.			* CBM-23136 (QCH)					
2/20/40 773C		CBM:DMG SK-4005	10/10/38 CS D904A		CBM:746-70			
NOV. 41		ALT. 0	NOV. 41 CBM TYPE 746-70					
29024	* SEE BELOW		CSD 29032	* SEE BELOW		CSZ 29038	TBK-8	
RELAY			RELAY			RELAY		
VOLTS COIL			4P-ST-SB-NO, WITH ONE BLOW OUT FIELD			DPST SB NORMALLY OPEN; CONTACTS RATED AT		
DPST NORMALLY OPEN CONTACT RATING AMPS.			COIL FOR 75 VOLT 7.5 AMP. CONTACTS			6 AMP 110 V. DC, 3 AMP 220 V. DC OR 15		
			RATED: 110 VOLTS - 30 AMPS AC, 4 AMPS			AMP 220 VOLTS AC. MAXIMUM COIL RATING IS		
			DC; 220 VOLTS - 25 AMPS AC., 2 AMPS DC.			22 MA AT 253 V. DC. MINIMUM IS 17.5 MA		
			COIL RATED: 115 VOLTS 60 CYCLES.			AT 200 V. DC.		
* CBM- 20022A (QCA)			* CBM-52094 (NM-10)					
6/10/38			10/10/38 CS2557		CBM:746-71			
NOV. 41			NOV. 41 CBM TYPE 746-71					
CAY 29025	TBL-3		CG-29033	TBC-2		CLR 29039	FA & FB	
ANTENNA TRANSFER RELAY			CONTACTOR PANEL			RELAY		
PANEL: SALENOID DESIGNED FOR 80 VOLTS			INCLUDES MAIN RECTIFIER PLATE STARTING			DPST SINGLE BREAK NORMALLY OPEN. COIL		
DC. RELAY PANEL HAS TWO SELF CONTAINED			CONTACTORS & RESISTORS; AS WELL AS POWER			RATED 115 V AC OR DC. PARTS 17 & 26 OF		
SERIES RESISTORS TYPE -63257E TO PERMIT			AMPLIFIER FILAMENT VOLTAGE REGULATOR &			CLR DRAWING OMITTED WHICH PREVENTS		
OPERATION FROM 250 VOLTS DC POWER			STARTING CONTACTOR.			OPERATION FROM DC. EACH POLE RATED 30		
SUPPLY. RF CONTACT RATING 20 AMP OR						AMPS 110 VOLTS AC 3/8" DIA SILVER		
250,000 VOLTS PEAK.						CONTACTS. 20 AMPS 220 VOLTS AC.		
6/17/38		T-7605628	10/18/38 CR-533989			4/25/41 6104		LA-1621
NOV. 41		SUB 0	NOV. 41			NOV. 41		REV. 0
CAY 29026	29023&29028		CRY 29034	TBK-8		CKF 29040	SD	
RELAY			KEYING RELAY			SHUTTER RELAY ELEMENT		
100 VOLT DC ± 10 V. COIL: SPST DB NO AND			DPST WITH AUXILIARY TRANSFER CONTACT.			THIS UNIT IS NOT PROVIDED WITH CONTACTS.		
(2) SPOT DB CONTACTS.			THE TWO POLES HAVE TWO BREAKS PER			IN OPERATION LOW RESISTANCE WINDING (8.5		
			CIRCUIT AND ARE NORMALLY OPEN. RATED 2			OHMS) IS MOMENTARILY EXCITED WHICH		
			AMP 500 V. AC OR 1 AMP 400 V. DC.			CAUSES THIS SHAFT TO ROTATE APPROXIMATE-		
			AUXILIARY TRANSFER CONTACT IS SPST,			LY 30°. WHEN IN THIS POSITION ENTIRE		
			SINGLE BREAK PER CIRCUIT. CONTACTS RATED			COIL (296.5 OHMS) IS IN CIRCUIT. SHAFT		
10/4/38 867377		CBM:773-41	11/14/38		P-720375-501	6/6/41 U-271		U-271
NOV. 41 CBM TYPE 773-41			NOV. 41		REV. 2	NOV. 41		
CAY 29027	52095 (QCH)		AT 0.25 AMP AT 250 V. DC.		29034	ROTATION LIFTS SHUTTER INDEX		29040
RELAY			MAX COIL CURRENT 126 MA AT 70 V. DC;			AND OPERATES SWITCH WHICH CHANGES FROM		
SAME AS -29029 EXCEPT HAS COIL FOR 75			MINIMUM 67 MA AT 37 VOLTS. NORMAL IS			PARTIAL COIL TO FULL COIL. OPERATES ON		
VOLT ± 10 V. OPERATION.			87 MA AT 48 V. DC.			24 VOLTS DC.		
10/4/38 867379		CBM:773-41						
NOV. 41 CBM:769-294								

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CRY 29041	TBL-4		CSD- 29046	TBK-8.TBL4		CRR 29052	RAP	
RELAY SPST, SINGLE BREAK, NORMALLY CLOSED. INSTANTANEOUS CLOSE, 0.1 SEC. TIME DELAY OPENING. COIL RATED 50 V. DC, 2400 OHMS. MINIMUM CURRENT REQUIRED FOR NORMAL OPERATION IS 0.009 AMP.			RELAY SPSTSB NORMALLY CLOSED. COIL RATED 11V DC +45%-23% AT 12 MA. CONTACTS RATED TO MAKE AND BREAK 5 A 230V DC MAGNETIC BLOW OUT. MINIMUM CURRENT FOR NORMAL OPERATION IS 0.007 AMPERES. *CAY:7609921 PT 1, REV 1 12/1/38 CX1968			RELAY - ROTARY TYPE TWO SPST NORMALLY CLOSED AND ONE SPDT CONTACTS RATED AT 5 AMP, 14 VOLTS. CURRENT DRAIN IS 4.5 AMP AT 12 VOLTS TO OPERATE, AND 0.6 AMP AT 12 VOLTS TO HOLD.		
11/18/38 E NOV. 41		CRV:K-856448-1 REV. 0	12/1/38 CX1968		CRV:K-855602-1 REV 0	5/29/39 NOV. 41		AC:55672-3 REV. 0
CAY 29042	-29008		CKU 29047	* SEE BELOW		CLR 29053	CRV-78091	10RE 78J 1199
KEYING RELAY 100 VOLT DC COIL SPST SB NO & (2) SPDT DB CONTACTS.			RELAY SPDT SB; COIL RATED 55 VOLTS 60 CYCLES AT APPROXIMATELY 12 MA; CONTACTS RATED; 2.5 AMP AT 115 V. AC; 1.2 AMPS AT 230 VOLTS AC NON INDUCTIVE LOAD.			RELAY DPDT SINGLE BREAK, 115 V. 60 CYCLES COIL MINIMUM VOLTAGE FOR NORMAL OPERATION IS 105 V. DC RESISTANCE OF COIL 530 OHMS. CONTACTS RATED AT 5 AMP 110 V. AC AND 5 AMP 110 V. DC NON INDUCTIVE LOAD. *CRV DWG. W-303207-11 REV. 0 6/9/39 1507-MX		*SEE ABOVE
11/29/38 867374 NOV. 41		CBM:773A	12/1/38 34C NOV. 41		CRV:K-843820-1 REV. 2	6/9/39 NOV. 41		
CSZ 29043	TBL-4		CSZ 29048	TBL-4		CLR 29054	CRV-78091	10RE 78J 1199
OVERLOAD RELAY-MANUAL RESET SPST, SINGLE BREAK, NORMALLY CLOSED; MANUAL RESET; COIL RATED: 5.38 OHMS DC ADJUSTABLE FOR OPERATION FROM 0.62 TO 1.25 AMPS; TYPE 739-S26-M21. CONTACTS RATED 0.4 AMP AT 230 VOLTS DC, 1 AMP AT 11/30/38 CLASS 9055		CRV:M-420648-4 REV. 2	RELAY 4P-ST, NORMALLY OPEN. COIL VOLTAGE 110 AC ± 10% 60 CYCLES. MAXIMUM OF 185 MA AT 122 V. AC. MINIMUM 70 MA AT 100 V. AC. OPERATES WITH 100 OHMS SERIES RESISTOR. COIL RESISTANCE 174 OHMS. CONTACTS RATED 3 A. 110 V. DC, 1.5 A. 220 V. DC, 6 A. 12/3/40 CLASS 8511-K		CRV:M-420465-1 NOV. 41	RELAY DPDT SINGLE BREAK; 90 TO 110 V. DC. COIL RESISTANCE 5000 OHMS. MINIMUM VOLTAGE FOR NORMAL OPERATION 76 V. DC. CONTACTS RATED 4 AMP 110 V. AC AND 4 AMP 110 V. DC NON-INDUCTIVE LOAD.		
NOV. 41 EQ 779			NOV. 41		CRV:M-420465-1 NOV. 41	6/9/39 NOV. 41		1027-BF SPECIAL CRV:W-303207 100 VOLTS DC. REV. 0
115 VOLTS DC, 5 AMP AT 110	29043		220 VOLTS AC.		29048	CLR 29055	GR	
VOLTS AC, OIL DASHPOT MAX ADJUSTMENT 1.35 A PULLIN, 0.15 A DROPOUT; MIN. ADJUSTMENT: 0.57 A PULLIN, 0.06 A DROPOUT.						RELAY DPST NORMALLY OPEN SINGLE BREAK COIL RATED 10 TO 12 VOLTS, 0.5 AMP DC; 24 OHMS DC.		
CSZ 29044	TBL-4		CSZ 29049	TBL-4		CLR 29056	GR	
OVERLOAD RELAY - MANUAL RESET. SPST, SINGLE BREAK, NORMALLY CLOSED, MANUAL RESET; COIL RATED: 22 OHMS DC; ADJUSTABLE FOR OPERATION FROM 0.31 TO 0.62 AMP DC, TYPE 739-S26-M24; CONTACTS RATED 0.4 AMP AT 230 VOLTS DC 1 AMP AT 115V DC, 5 AMP AT 115V AC. OIL 11/30/38 CLASS 9055		CRV:M-420648-3 REV. 2	RELAY 4PST NORMALLY OPEN. COIL RATED: 90 VOLTS DC ± 10%; 68 MA MAX. AT 99 VOLTS DC, 51 MA MIN. AT 81 VOLTS DC, 1650 OHMS DC; CONTACTS RATED 3 AMP AT 110 VOLTS DC, 1.5 AMP AT 220 VOLTS DC OR 6 AMP AT 220 VOLTS AC. 12/3/40 CLASS 7811-K		CRV:M-420465-2 NOV. 41	RELAY DPDT SINGLE BREAK; COIL RATED 10 TO 12 VOLTS; DC, 67 OHMS DC.		
FEB. 45 EQ 779			NOV. 41		COIL:1305-SI-M36REV. 6	8/14/39 COIL #354 NOV. 41		CRR DWG A17539 REV. 0
DASHPOT. MAX. ADJUSTMENT: CSZ 29044			CRY 29050	CRV-50064		CLR 29057	OP-9,10/DQ-3	
0.67 AMP PULLIN, 0.07 AMP DROPOUT; MIN. ADJUSTMENT, 0.29 AMP PULLIN, 0.03 AMP DROPOUT.			RELAY SPECIAL FOR USE IN SPEECH AMPLIFIER INPUT, METAL PARTS PLATED. OPERATED FROM 115 VOLTS D.C. SIMILAR TO AUTOMATIC ELEC. CO. TYPE ZQA, COIL NO. D-282377.			RELAY DPST SINGLE BREAK, NORMALLY CLOSED; COIL RATED 6 V, 50 TO 60 CYCLES, 5.4 VOLTS MINIMUM, 7.5 V MAXIMUM. CONTACTS RATED 2 AMP AT 110 VOLTS AC OR DC NON INDUC- TIVE LOAD. COIL 280 TURNS #23 E WIRE, 1.5 OHMS DC RESISTANCE.		
CSZ 29045	* SEE BELOW		12/9/38 NOV. 41		CRV:M-418060- 504 ALT. 7	8/23/39 L-131 NOV. 41		COIL 367
RELAY DPST SB NORMALLY OPEN; COIL RATED 115 V. DC ± 10%, 2620 OHMS DC RESISTANCE, CLOSE AT 39.6 MA AT 103.5 VOLTS. MAX. COIL RATING 48.3 MA AT 126.5 VOLTS DC. CON- TACTS RATED 6 AMP AT 110 V. DC, 3 AMP AT * TBK8, TBK10, TBL4. 12/1/38 CLASS 7811		CRV:K-860238-1 REV. 5	NOV. 41			CRV:K-854724-1 REV 3		
220 VOLTS DC, 15 AMP AT 220	29045		CRY 29051	* SEE BELOW		CSD 29058	TBK-9	
V. 60 CYCLES.			PRIMARY CONTROL RELAY DOUBLE POLE, SINGLE THROW. COIL RATING 110 VOLTS A.C., 1300 OHMS. CONTACT RATING: 50 WATTS BUT NOT MORE THAN 1 AMP SINGLE MAKE, NORMALLY OPEN. COIL RATED 1800 OHMS, 0.010 AMPS D.C. RELAY IS A * TBA-5, TBK-11, TBM-6 & TBU-1, 3. 12/19/40		CAY:M-7407636-1 SUB. 0	9/21/39 CXA-2119 NOV. 41		T-760138-11 SUB. 2
			NOV. 41			CSD 29059	TBK-9	
			TYPE "C", WITH COIL W-1064		29051	THERMOSTAT RELAY SPDT SINGLE BREAK; COIL RATED 10 VOLTS DC ± 10% CONTACTS RATED 5 AMPS AT 230 VOLTS DC. RESISTANCE 930 OHMS D.C.		
			AND WITH TWO FORM "A" SILVER SIZE #18 CONTACTS.			9/21/39 CXB-1968 NOV. 41		T-760138-12 SUB. 2

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CAY 29060	TBK-9 & YB		CAY 29063	TBK-9		CAY 29069	YB, YC, YD			
OVERLOAD RELAY - MANUAL			FIELD CONTACTOR			TIME DELAY RELAY				
RESET. SPST SINGLE BREAK, NORMALLY CLOSED; ADJUSTABLE FOR OPERATION FROM 0.25 TO 0.7 AMPS (S#1156527 OPERATING COIL) CONTACTS RATED 0.5 AMP AT 230 VOLTS AC/DC. COIL RESISTANCE 103 OHMS DC.			DPST DOUBLE BREAK, NORMALLY OPEN COIL RATED: 110 VOLTS ± 10% 60 CYCLES; 0.085 AMPS; CONTACTS RATED: 5 AMPS AT 220 VOLTS AC. COIL RESISTANCE 6.5 OHMS D.C. (CAY TYPE 5-FN-61)			SPST DOUBLE BREAK, NORMALLY OPEN, SELF STARTING SYNCHRONOUS MOTOR TYPE WITH ADJUSTMENTS TO A MAXIMUM TIME OF 1 MIN. CONTACTS WILL BREAK 1.5 AMP AT 125 VOLTS DC OR 5 AMP AT 125 VOLTS AC.				
9/21/39 SC-1 T-7606174-23			9/21/39 RELAY:S#883371 T-7606174-4			10/18/39 TD CAT 41-365				
NOV. 41 S#1155099 SUB. 7			NOV. 41 COIL:S#874114 SUB. 7			AUG. 43 S#819820 25 JAN. '37				
CAY 29060A	T2M-5		CAY 29064	TBK-9		CSD 29070	YB, YC, YD			
OVERLOAD RELAY-MANUAL			STARTING CONTACTOR			RELAY (SWITCHBOARD TYPE)				
RESET			4PST DOUBLE BREAK, 3 POLES NORMALLY OPEN AND 1 POLE NORMALLY CLOSED. COIL RATED: 60 VOLTS DC; CONTACTS RATED 5 AMPS AT 220 VOLTS AC. COIL RESISTANCE 330 OHMS D.C. (CAY TYPE 5-FN-61)			SPST SINGLE BREAK NORMALLY OPEN; COIL RATED 110 V. 60 CYCLES; CONTACTS RATED (NON INDUCTIVE) 6 AMP 110 V. AC, 3 AMPS 220 VOLTS AC; 1 AMP AT 115 VOLTS DC.				
SPST, SINGLE BREAK, NORMALLY CLOSED; ADJUSTABLE FOR OPERATION FROM 0.25 TO 0.7 AMPS (S#1156527 OPERATING COIL); CONTACTS RATED 0.5 AMP AT 230 VOLTS AC/DC; SAME AS BASIC TYPE EXCEPT FOR			9/21/39 RELAY:S#918194 T-7606174-5			11/3/39 CXC 1620				
8/15/40 SC-1 4-A-1815			NOV. 41 COIL: SPECIAL SUB. 7			NOV. 41 MARK 50A				
NOV. 41 S#1155099C SUB. 4										
IMPROVEMENTS IN COMPONENTS. 29060-A			CAY 29065	TBK-9		CSD 29071	YB, YC, YD			
			STARTING CONTACTOR			RELAY (SWITCHBOARD TYPE)				
			4PST DOUBLE BREAK; 3 POLES NORMALLY OPEN AND 1 POLE NORMALLY CLOSED. COIL RATED: 60 VOLTS, 60 CYCLES; CONTACTS RATED 5 AMPS AT 220 VOLTS AC. COIL RESISTANCE 3 OHMS D.C. (CAY TYPE 5-FN-61)			DPST SINGLE BREAK; COIL RATED 110 VOLT 60 CYCLES AND 24 V. DC; CONTACTS RATED 30 AMP 110 VOLT AC; 25 AMP 220 VOLTS AC; 4 AMP 110 VOLTS DC; 2 AMPS 220 VOLTS DC.				
			9/21/39 RELAY:S#918194 T-7606174-6			11/3/39 CDBK 8 S				
			NOV. 41 COIL:S#1128913 SUB. 7			NOV. 41 MARK 40				
			CAY 29066	TBK-9		CAY 29072	TBL-5			
			KEYING RELAY			OVERLOAD RELAY-ELECTRICAL				
			4PST DOUBLE BREAK, 3 POLES NORMALLY OPEN AND 1 POLE NORMALLY CLOSED. COIL RATED, 60 TO 100 VOLTS DC, 740 OHMS, 100 WORDS PER MINUTE.			RESET				
			9/21/39 RELAY#867353 T-7606188-1			SPST, SINGLE BREAK, NORMALLY CLOSED; ADJUSTABLE FOR OPERATION FROM 0.25 TO 0.7 AMP (S#1156527 OPERATING COIL); RESET COIL (S#935681) RATED 115 VOLTS 60 CYCLES; CONTACTS RATED 0.5 AMP AT 230				
			NOV. 41 SUB. 3			1/24/40 SC-1 T-7606174-19				
						NOV. 41 S#1155095 SUB. 7				
			CAY 29067	TBL-5		VOLTS AC/DC; SAME AS NAVY 29072				
			OVERLOAD - RELAY			TYPE CAT-29067 EXCEPT FOR RESET COIL.				
			ELECTRICAL RESET							
			SPST, SINGLE BREAK, NORMALLY CLOSED; ADJUSTABLE FOR OPERATION FROM 0.25 TO 0.7 AMP. (S#1156527 OPERATING COIL); RESET COIL (S#935681) RATED: 115 VOLTS, 60 CYCLES; CONTACTS RATED 0.5 AMP AT 230							
			10/18/39 SC-1 T-7606174-18							
			NOV. 41 S#1155093 SUB. 7							
			VOLTS AC/DC. 29067							
			CAY 29068	TBL-5		CAY 29073	TBL-5			
			OVERLOAD RELAY-ELECTRICAL			OVERLOAD RELAY -				
			RESET			ELECTRICAL RESET				
			SPST SINGLE BREAK, NORMALLY CLOSED; ADJUSTABLE FOR OPERATION FROM 0.75 TO 2 AMP (S#1155101 OPERATING COIL); RESET COIL (S#935681) RATED 115 VOLTS, 60 CYCLES; CONTACTS RATED 0.5 AMP AT 230			SPST, SINGLE BREAK, NORMALLY CLOSED; ADJUSTABLE FOR OPERATION FROM 0.75 TO 2 AMP (S#1155101 OPERATING COIL); RESET COIL (S#935681) RATED 115 VOLTS, 60 CYCLES; CONTACTS RATED 0.5 AMP AT 230				
			10/18/39 SC-1 T-7606174-2			1/24/40 SC-1 T-7606174-20				
			NOV. 41 S#1155094 SUB. 7			NOV. 41 S#1155096 SUB. 7				
			VOLTS AC/DC; SAME AS NAVY 29068			VOLTS AC/DC; SAME AS NAVY 29073				
			TYPE CAT-29067 EXCEPT FOR OPERATING COIL.			TYPE CAT-29068 EXCEPT FOR RESET COIL.				
			CAY 29062	TBK-9		CAY 29074	TBL-5			
			FIELD CONTACTOR			OVERLOAD RELAY-ELECTRICAL				
			DPST DOUBLE BREAK NORMALLY OPEN; COIL RATED 115 V. DC CONTACTS RATED: 5 AMP AT 220 VOLTS AC. COIL RESISTANCE 630 OHMS D.C. (CAY TYPE 5-FN-61)			RESET				
			9/21/39 RELAY:S#883371 T-7606174-3			SPST, SINGLE BREAK, NORMALLY CLOSED; ADJUSTABLE FOR OPERATION FROM 0.25 TO 0.7 AMP (S#1156527); RESET COIL (S#873398) RATED 230 VOLTS DC; CONTACTS RATED 0.5 AMP AT 230 VOLTS AC/DC; SAME AS NAVY				
			NOV. 41 COIL:S#875799 SUB. 7			1/24/40 SC-1 T-7606174-21				
						NOV. 41 S#1155097 SUB. 7				
DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER

Class 29—Electromagnetic Contact Devices

3.29-5

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION			
TYPE CAY-29067 EXCEPT FOR RESET COIL.		29074	CSZ 29081	QCJ-2&QCL	OVERLOAD RELAY SPST SINGLE BREAK, NORMALLY CLOSED, AUTOMATIC RESET BY GRAVITY OPERATED PLUNGER IN OIL DASHPOT. OPERATION COIL CALIBRATED 0.46 TO 0.92 AMP DC. CONTACTS RATED AT 1 AMP 115 V. DC OR 5 AMP 115 V. AC. 7/12/40 EQ745 NOV. 41	CRV:W-303083-161	CG-29089	TBC-3 CONTACTOR UNIT INCLUDES MAIN RECTIFIER PLATE STARTING CONTACTORS AND RESISTORS AS WELL AS POWER AMPLIFIER VOLTAGE REGULATOR & STARTING CONTACTORS; EQUIPMENT SUPPLY: 440 VOLTS, 3 PHASE, 25 CYCLES. 11/28/40 HL-766118702 NOV. 41	P7763144 REV. 0		
CAY 29075	TBL-5	OVERLOAD RELAY-ELECTRICAL RESET. SPST, SINGLE BREAK, NORMALLY CLOSED; ADJUSTABLE FOR OPERATION FROM 0.75 TO 2 AMP (S#1155101 OPERATING COIL) RESET COIL (S#878398) RATED 230 VOLTS DC CONTACTS RATED 0.5 AMP AT 230 VOLTS AC/DC: SAME AS NAVY TYPE CAY-29068. 1/24/40 SC-1 NOV. 41	S#1155098	SUB. 7	CSZ 29082	QCJ-2&QCL	OVERLOAD RELAY SPST SINGLE BREAK, NORMALLY CLOSED; AUTOMATIC RESET BY GRAVITY OPERATED PLUNGER IN OIL DASHPOT. OPERATION COIL CALIBRATED 5.4 TO 10.8 AMP D.C. CONTACTS RATED 1 AMP 115 V. DC OR 5 AMP 115 V. AC. 7/12/40 9055 NOV. 41	CRV:W-303245-39	CW-29090	* SEE BELOW KEYING RELAY POLARISED SINGLE POLE DOUBLE THROW. RELAY WITH REED TYPE ARMATURES. COIL RATING: OPERATING CURRENT 0.015 AMP; PARALLEL WINDINGS 85 OHMS EACH. CONTACTS RATED 110 MA. * TAB-5, TBK-11 TBM-6 & TBU-1. 12/19/40 215A NOV. 41	S. I. 1008; CAY: M-7407820 SUB 0
EXCEPT FOR RESET COIL.		29075	CSZ 29083	QCJ-2&QCL	RELAY 4SPST SINGLE BREAK NORMALLY OPEN; COIL RATED 110 V. 50 TO 60 CYCLES. CONTACTS RATED 9 AMP 600 V. AC. MINIMUM CURRENT FOR NORMAL OPERATION IS 1 AMP. 7/12/40 L-8 NOV. 41	CRV:303083-159	CKU 29091	TBM-4, 5 & 6	VOICE RELAY SPDT; MAXIMUM COIL RESISTANCE, 1800 OHMS DC; DROP-OUT TIME 0.006 SECOND; COIL CURRENT 6 MA (PICK UP); CONTACT GAP 0.025". 10/10/40 220-C-37 NOV. 41	CAY:T-7606218-4 SUB. 2	
CBY 29076	CF-9	ANTENNA RELAY UNIT SAME AS NAVY TYPE CBY-23049 EXCEPT FOR OPERATION FROM 28 VOLTS DC INSTEAD OF 14 VOLTS DC. 2/28/40 NOV. 41	CRV 29084	QCJ-2, QCL	SPECIAL MULTI-CONTACT RELAY. CONTACTS RATING: OUTPUT CONTACTS 3 AMP, 200 VOLTS, OTHER CONTACTS 1 AMP 200 VOLTS. MINIMUM CURRENT FOR NORMAL OPERATION IS 100 MILLIAMPERES. COIL VOLTAGE RATING - 60 VOLTS. 7/12/40 (CRY) B-2932 NOV. 41	W-303076-31 W-303085-183	CG-29092	TBC-3	CONTACTOR UNIT INCLUDES MAIN RECTIFIER PLATE STARTING CONTACTORS AND RESISTORS AS WELL AS POWER AMPLIFIER VOLTAGE REGULATOR AND STARTING CONTACTORS. EQUIPMENT SUPPLY, 220 VOLTS, 3 PHASE, 60 CYCLES. SAME AS NAVY TYPE -29033 EXCEPT FOR RESISTANCE 10/14/40 HL-7661187 NOV. 41	P-7762976 REV. 0	
CPB 29077	TAJ-8	KEYING RELAY ONE SPDT SINGLE BREAK CIRCUIT AND ONE SPST SINGLE BREAK NORMALLY OPEN CIRCUIT. COIL RATED 25 VOLTS, 0.086 AMPS DC. DC RESISTANCE 240 OHMS. 3/2/40 L71359 NOV. 41	L71359A	CWE 29085	* SEE BELOW SLOW RELEASE RELAY SPST NORMALLY OPEN, RELEASE TIME: 1.5 TO 2 SECONDS; COIL RATED 50 MA AT 110 VOLTS ± 15%, 60 CY.; CONTACTS RATED 1 AMP AT 110 VOLTS AC INDUCTIVE LOAD. * 23216 TAB-5, TBK-11 TBM-6 & TBU-1. 11/25/40 1040-79 NOV. 41	BK-97A	VALUES.	29092			
CSI 29078	CBH-78102	RELAY SPDT SINGLE BREAK. COIL RATED 50 OHMS; CONTACTS RATED: 150 WATTS (NON INDUCTIVE) AT 110 VOLTS AC. 4/8/40 3A NOV. 41	CBM:746-73 REV. 0	CWE 29086	* SEE BELOW SLOW RELEASE RELAY SPST NORMALLY OPEN; RELEASE TIME 1.5 TO 2 SECONDS; COIL RATED: 50 MA AT 110 VOLTS ± 15% 25 CYCLES; CONTACTS RATED 1 AMP AT 110 VOLTS AC INDUCTIVE LOAD. * 23217 (TBA-5, TBK-11 & TBM-6). 10/15/40 1040-79 NOV. 41	BK-997A	10/17/40 NOV. 41	ESR:677839 ISSUE 4			
CBM 29079	WAB	TRANSFER-RELAY UNIT INCLUDES KEYING RELAY FOR RANGING AND MISC. RELAYS TO SHIFT CONTROL FROM SOUNDING TO RANGING OR VICE VERSA. 4/10/40 804A NOV. 41	SK-4468C REV. 0	CWE 29087	* SEE BELOW SLOW RELEASE RELAY SPST NORMALLY CLOSED; RELEASE TIME 1.5 TO 2 SECONDS; COIL RATED 71 MA AT 110 VOLTS ± 15% 60 CYCLES; CONTACTS RATED 1 AMP AT 110 VOLTS AC INDUCTIVE LOAD. * 23216 (TAB-5, TBK-11 TBM-6 & TBU-1) 10/15/40 1040-78 NOV. 41	BK-998A	10/19/40 777A NOV. 41	CBM:DMG6790B ALT. 0			
CSZ 29080	QCJ-2 & QCL	TIME DELAY RELAY SPST SINGLE BREAK, NORMALLY OPEN; VARIABLE TIME ADJUSTMENT OF 1 TO 60 SECONDS WITH QUICK RELEASE. COIL RATED 110 V., 50 TO 80 CYCLES CONTACTS RATED 1 A. 115 V. DC, OR 5 AMP 115 V. AC. MINIMUM CURRENT FOR NORMAL OPERATION IS 0.25 A. 7/12/40 EQ-754 NOV. 41	CRV:W-303083-160	CWE 29088	* SEE BELOW SLOW RELEASE RELAY SPST NORMALLY CLOSED; RELEASE TIME 1.5 TO 2 SECONDS; COIL RATED 71 MA AT 110 VOLTS ± 15% 25 CYCLES; CONTACTS RATED 1 AMP AT 110 VOLTS AC INDUCTIVE LOAD. * 23217 (TBA-5, TBK-11 & TBM-6) 11/25/40 1040-78 NOV. 41	BK-998A	10/23/40 MN:S#1158584 JUNE 42 NOV. 41	CAY:7-7607082-1 SUB 4			

RESTRICTED

NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
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29095
INTERCHANGEABLE WITH TYPE -29060

CBM 29101 NJ-2
FUSE RELAY BOX
CONTAINS FUSES FOR INPUT & OUTPUT CIRCUITS OF MOTOR-GENERATOR UNIT TOGETHER WITH STARTING RELAY. IDENTICAL WITH TYPE CBM-29094 EXCEPT FOR FUSE VALUES & STARTING RELAY COIL WHICH ARE FOR OPERATION FROM 115 V. DC.
10/25/40 777C CBM DWG 6790 B
NOV. 41 ALT. 0

0.085 AMPS, 100 OHMS. 29105
CONTACTS RATED 110 VOLTS, 10 AMPS.

CAY 29096 TAB-5
OVERLOAD RELAY-MANUAL
RESET. SPST, SINGLE BREAK, NORMALLY CLOSED; ADJUSTABLE FOR OPERATION FROM 1 TO 4 AMP DC. CONTACTS RATED 0.5 AMP CONTINUOUS & INTERRUPTING. RATED 5 AMP 115 V. AC, & 1.5 AMPS 125 V. DC. COIL 0.6 OHMS DC. SAME AS TYPE 29095 EXCEPT 10/23/40 SN S#1158585 T-7607087-2 DEC. 44 COIL-S#1158866 SUB. 8

CAY 29102 *SEE BELOW
OVERLOAD RELAY: SPST.
SINGLE BREAK, NORMALLY CLOSED, ADJUSTABLE FOR OPERATION FROM .1 TO .4 AMPS. COIL RESISTANCE 64 OHMS. CONTACT RATING .5 AMP, 230 VOLTS AC/DC. WEMCO S#1158933 COIL S#1158833, SAME AS TYPE-29095 EXCEPT FOR COIL AND CALIBRATION.
12/19/40 MN T-7607087-4
JUNE 42 SUB 3

CAY 29106 *SEE BELOW
TIMING RELAY
FOR 115 VOLTS 25 CYCLES OPERATION, SYNCHRONOUS MOTOR DRIVEN, ADJUSTABLE FROM 2 SECONDS TO 50 MINUTES. HAS TWO SETS OF CONTACTS: 1 SET SPDT, AND 1 SET SPST. CONTACTS ADJUSTABLE TO OPERATE * TAB-5, TBK-11, TBM-6 & TBU-1.
12/19/40 TK 56-D-815
NOV. 41 S#1008930 SUB. 5

CAY 29096
FOR COIL & CALIBRATION.

CAY 29102

SIMULTANEOUSLY. CONTACT 29106
RATINGS 20 AMP 115 VOLTS, AC. 15 AMP 230 VOLTS, AC. 3 AMP AT 125 VOLTS DC.

*TBK-11 AND TBM-5,6

CAY 29097 TAB-5
POWER CONTACTER
3PST DOUBLE BREAK, NORMALLY OPEN; COIL RATED 115 V. 60 CY. - AMPS. CONTACTS RATED 5 AMPS AT 440 V. AC. MINIMUM OPERATING CURRENTS: CLOSED GAP, 0.46 AMP; OPEN GAP 2.75 AMP.
(CAY TYPE 5-FN-61)
10/23/40 S#918193 RELAY T-7606174-25
NOV. 41 S#874114 COIL SUB. 10

CAY 29103 *SEE BELOW
OVERLOAD RELAY
SPST, SINGLE BREAK; NORMALLY CLOSED; ADJUSTABLE FOR OPERATION FROM 0.5 TO 2.0 AMP. COIL RESISTANCE 2.5 OHMS. CONTACT RATING 0.5 AMP, 230 VOLTS AC/DC. WEMCO S#1158982, COIL S#1158885.
* TBK-11 & TBM-5, 6.
12/19/40 MN T-7607087-3
JUNE 42 SUB. 8

CAY 29107 *SEE BELOW
TIMING RELAY
FOR 115 VOLTS 60 CYCLES OPERATION, SYNCHRONOUS MOTOR DRIVEN, ADJUSTABLE FROM 2 SECONDS TO 50 MINUTES. HAS TWO SETS OF CONTACTS: ONE SET SPDT, AND 1 SET SPST. CONTACTS ADJUSTABLE TO OPERATE * TAB-5, TBK-11, TBM-6 & TBU-1.
12/19/40 TK 56-D-815
NOV. 41 S#936926 SUB. 5

CAY 29098 TAB-5
POWER CONTACTER
3PST DOUBLE BREAK, NORMALLY OPEN; COIL RATED 115 VOLTS; 25 CYCLES. CONTACTS RATED 5 AMP AT 440 V. AC. SAME AS 29097 EXCEPT COIL RATING. MINIMUM CURRENTS: CLOSED GAP = 0.23 AMP. OPEN GAP IS 1.35
*S#918198 RELAY; S#1014647 COIL.
10/23/40 *S-E ABOVE & T-7606174-26
NOV. 41 CAY:5-FN-61 SUB. 10 FOR SIZE

SAME AS -29096 EXCEPT FOR 29103
COIL AND CALIBRATION.

SIMULTANEOUSLY. CONTACT 29107
RATING 20 AMP 115 VOLTS AC. 15 AMP 230 V. AC. 3 AMP 125 V. DC.

AMP. FOR NORMAL OPERATION. 29098

CPB 29104 *SEE BELOW
RELAY-LATCHING TYPE WITH
ELECTRIC RELEASE.
THREE DOUBLE BREAK, SINGLE POLE, SINGLE THROW CONTACTS, TRIPPING COILS RATED 110 VOLTS, 25 CYCLES, 0.030 AMPS, 680 OHMS. CLOSING COILS RATED 110 VOLTS, 25 CYCLES
* TAB-5, TBK-11, TBM-6 & TBU-1.
12/19/40 R-901 R-901 & R-1027
NOV. 41 R-888A

CAY 29108 TAB-5
KEYING RELAY:
3 MAKES & ONE BREAK, TWO BREAKS PER CIRCUIT, COIL RATED 0.10 AMP AT 75 V DC, 1800 OHMS, BREAKS 10 WATTS AT 0.056 AMP.
12/19/40 CAY:T-7604741-
AUG. 42 G10 SUB 56

CAY 29099 TAB-5
POWER CONTACTER
2 SPST DOUBLE BREAK NORMALLY OPEN AND ONE SPDT DOUBLE BREAK, COILS RATED 115 VOLTS. 60 CYCLES, 4.6 AMPS, CONTACTS RATED AT 5 A. AT 440 V. AC. MINIMUM OPERATING CURRENT CLOSED GAP 0.46 A. OPEN GAP 2.75 A. (CAY TYPE 5-FN-61)
10/23/40 S#918194 RELAY T-7606174-7
NOV. 41 S#874114 COIL SUB. 10

0.1 AMP, 550 OHMS. CONTACTS 29104
RATED 120 VOLTS, 10 AMPS.

CSD 29109 *SEE BELOW
RELAY
CONTACT RATING: 5 AMP AT 110 VOLTS 25 CYCLES, SINGLE BREAK, TWO POLES-DOUBLE THROW CONTACTS, SINGLE BREAK. COIL RATING-110 VOLTS AC, 0.070 AMP.
* TAB-5, TBK-11, TBM-6 & TBU-1.
12/19/40 CXC-1946 P-3129 & P-1151
NOV. 41 COIL 3035-38 P-3128

CAY 29100 TAB-5
POWER CONTACTER: 2 SPST
DOUBLE BREAK NORMALLY OPEN AND ONE SPOT DOUBLE BREAK. COIL RATED 115 V. 25 CY. AC CONTACTS RATED 5 AMPS AT 440 V AC. SAME AS 29099 EXCEPT FOR COIL RATING. MINIMUM OPERATING CURRENT: CLOSED GAP .23 A. OPEN GAP 1.35 A. CAY TYPE 5-FN-61
10/23/40 S#918194 RELAY T-7606174-27
NOV. 41 S#1014647 COIL SUB 10

CPB 29105 *SEE BELOW
RELAY-LATCHING TYPE WITH
ELECTRIC RELEASE.
THREE DOUBLE BREAK, SINGLE POLE, SINGLE THROW CONTACTS, TRIPPING COILS RATED 110 VOLTS, 60 CYCLES, 0.055 AMPS, 240 OHMS. CLOSING COILS RATED 110 VOLTS 60 CYCLES,
* TAB-5, TBK-11, TBM-6 & TBU-1.
12/19/40 R-900 R-900A & R1028
NOV. 41 R888A

CSD 29110 *SEE BELOW
RELAY
CONTACT RATING: 5 AMP AT 110 VOLTS 60 CYCLES, TWO POLE DOUBLE THROW CONTACTS, SINGLE BREAK. COIL RATING 110 VOLTS AC. 5 AMPS.
* TAB-5, TBK-11, TBM-6 & TBU-1.
12/19/40 CXC-1946 P-3129 & P-1151
NOV. 41 COIL 3035-35 P-3128

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
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CAY 29111 YB
 OVERLOAD RELAY: SPST SINGLE BREAK NORMALLY CLOSED. ADJUSTABLE FOR OPERATION FROM .25 TO 1 AMP DC. CONTACTS RATED 5 AMPS CONTINUOUS AND 1.5 AMPS INTERRUPTING CAPACITIES OR 115 VOLTS AC. DC RESISTANCE OF COIL 13 OHMS. MECHANICALLY INTERCHANGEABLE WITH TYPE -29060.
 3/8/41 HN S#1202965 1-D-2145
 NOV. 41

CAY-29111-A YR
 OVERLOAD RELAY SPST, SINGLE BREAK, NORMALLY CLOSED. ADJUSTABLE FOR OPERATION FROM 0.25 TO 1 AMP DC. CONTACTS RATED 5 AMPS CONTINUOUS AND 1.5 AMPS INTERRUPTING ON 115/1/60. DC RES OF COIL IS 13 OHMS. SAME AS RESET COIL #1158889
 5/8/45 HN S#1202965-A
 JUN. 45 GSEE ABOVE

CAY-29111-A
 -29111 HAS RESET COIL WHICH OPERATES FROM 115/1/60.

CHN 29112 SD
 RELAY SINGLE POLE CIRCUIT-BREAKER. OPEN AT 15 AMPS, 110 VOLTS 60 CYCLES.

6/2/41 0111
 NOV. 41

CRY 29113 TAB-5
 RELAY SPST SINGLE BREAK, NORMALLY OPEN, COIL RATED: 0.095 AMP AT 115 VOLTS SINGLE PHASE, 60 CYCLES; CONTACT RATED: 125 WATTS BUT NOT MORE THAN 2 AMP. COIL RESISTANCE: 70 OHMS DC. # A; COIL W5-1000 CONTACTS FORM C #14.
 5/1/41 Q SEE ABOVE CAY:M-7407636-2
 NOV. 41 SUB. 3

CRY 29114 TAB-5
 RELAY SPST SINGLE BREAK, NORMALLY OPEN; COIL RATED: 0.02 AMPS. AT 115 VOLTS, SINGLE PHASE 25 CYCLES; CONTACTS RATED: 125 WATTS BUT NOT MORE THAN 2 AMPS. SAME AS CRY-29113 EXCEPT COIL IS DESIGNED FOR 25 #A. COIL W5-1013 CONTACTS FORM C #14.
 5/1/41 *SEE ABOVE CAY:M-7407636-2
 NOV. 41 SUB. 3

CYCLE OPERATION. COIL 29114
 RESISTANCE: 920 OHMS DC.

CLR 29115 YB-1
 RELAY SPST, DOUBLE BREAK NORMALLY OPEN; COIL RATED 12 VOLTS, 1.7 AMP. DC. 7 OHMS DC CONTACTS RATED 60 AMPS AT 115 VOLTS, NON INDUCTIVE AC LOAD.

5/16/41 5030C
 NOV. 41

CPB 29116 YB-1
 RELAY SPST DOUBLE BREAK NORMALLY OPEN; COIL RATED 70 VOLTS 50 MA DC; 1400 OHMS DC; TO OPERATE IN SERIES WITH A 5000 OHMS RESISTOR AT 300 VOLTS DC; CONTACTS RATED 50 AMPS AT 115 VOLTS NON INDUCTIVE AC LOAD.
 5/16/41 76-STYC R-681
 NOV. 41

CPB 29117 YB-1
 RELAY-QUICK OPEN TYPE SPST, DOUBLE BREAK, NORMALLY OPEN; COIL RATED 115 VOLTS AT 145 MA AC. 32 OHMS DC; CONTACTS RATED 30 AMPS AT 115 VOLTS NON INDUCTIVE AC LOAD.

5/16/41 Y-33-8C-A R-600B
 NOV. 41 10-19-40

CPB 29117-A YB-1
 RELAY, QUICK OPEN TYPE SPST, SINGLE BREAK, NORMALLY OPEN, COIL RATED 115 V AT 145 MA AC, 32 OHMS DC, CONTACTS RATED 50 AMP AT 115 V NON-INDUCTIVE AC LOAD.

5/16/41 Y-33-8C-A R 600 B,
 DEC. 41 10-19-40

CPB 29118 YB-1
 RELAY OPDT, SB, COIL 12 V DC AT 0.15 AMP, RESISTANCE 80 OHMS DC, 2350 TURNS #31 ENAMELED WIRE. CONTACTS RATED 7 AMP AT 110 V AC RESISTIVE LOAD.

10/16/41 TYPE 11 R 793 SUB 1
 DEC. 41

CAU 29119 YB-1
 RELAY SPDT, SINGLE BREAK; COIL RATED 110 VOLTS, 47 TO 58 MA AC; 130 OHMS DC.

5/16/41 FQA;RAS-4
 NOV. 41

CPB 29120 YB-1
 RELAY DPDT SINGLE BREAK, COIL RATED 12 VOLTS 43 MA DC; 280 OHMS DC, CONTACTS RATED 2 AMPS AT 110 VOLTS NON INDUCTIVE AC LOAD

5/16/41 12 TYPE 12
 NOV. 41

CPB 29121 YB-1
 RELAY 4PST SINGLE BREAK, 2 POLES NORMALLY OPEN & 2 POLES NORMALLY CLOSED; COIL RATED 115 VOLTS 145 MA AC; 65 OHMS DC, EACH SET OF CONTACTS RATED 20 AMPS AT 115 VOLTS NON INDUCTIVE AC LOAD.

5/16/41 Z 100-B R-349
 NOV. 41

CPB 29122 YB-1
 RELAY 3PST SINGLE BREAK, NORMALLY OPEN; COIL RATED 115 VOLTS, AT 145 MA AC, 65 OHMS DC; CONTACTS RATED 35 AMP AT 115 VOLTS NON INDUCTIVE AC LOAD.

5/16/41 MZBG R-602
 NOV. 41

CPB 29123 YB-1
 RELAY 8PST, 4 POLES NORMALLY OPEN & 4 POLES NORMALLY CLOSED. COIL RATED 115 VOLTS AT 145 MA AC, 65 OHMS DC; EACH SET OF CONTACTS RATED 35 AMP AT 115 VOLTS NON INDUCTIVE AC LOAD.

5/16/41 MZBU R-631
 NOV. 41

CBM 29124 NJ-4
 FUSE RELAY BOX CONTAINS FUSES FOR INPUT AND OUTPUT CIRCUITS, STARTING RELAY, FILTER CAPACITORS IN THE DC INPUT CIRCUIT. TWO FUSES RATED AT 10 AMP 250 VOLTS, TWO RATED AT 20 AMP 250 VOLTS. RELAY COIL RATED FOR OPERATION AT 115 V. DC.

5/17/41 777E CBM:DHG SK-4397
 NOV. 41 ALT. 1

CBY 29125 ATA
 ANTENNA RELAY UNIT INCLUDES RELAY TO SWITCH ANTENNA FROM TRANSMITTER TO RECEIVER AND VICE VERSA, GROUNDING THE UNITS NOT IN ACTUAL USE. HAS "LOCAL-REMOTE" SWITCH AND 0 TO 10 R. F. THERMOCOUPLE AMMETER.

5/20/41 5017-3-B
 MAR. 42 7977-4-A

CBY 29126 ATA
 ANTENNA RELAY UNIT MOUNTING. PROVIDES ANTI-SHOCK MOUNTING FOR ANTENNA RELAY UNIT TYPE CBY-29125.

5/20/41 7056-1-B
 MAR. 42 7977-4-A

CAY 29127 * SEE BELOW
 RELAY COIL RATED 115 VOLTS DC; 1375 OHMS DC RESISTANCE. 3 MAKE CONTACTS RATED AT 220 VOLTS, 5 AMP AC.

* TBU, TBU-1, 2, 3.
 5/28/41 FRAME S#918193 T-7606174-31
 NOV. 41 COIL S#875799 SUB. 13

CAY 29128 * SEE BELOW
 RELAY COIL RATED 60 VOLTS, 25 CYCLES, 0.9 AMP CLOSED GAP, 5.0 AMP OPEN GAP. COIL RESISTANCE 8.0 OHMS. 3 MAKE AND TWO BREAK CONTACTS, RATED AT 5 AMP, 220 VOLTS AC.

* TBU, TBU-1, 2, 3.
 5/28/41 FRAME S#1228471 T-7606174-29
 NOV. 41 COIL S#1186519 SUB. 13

CAY 29129 * SEE BELOW
 RELAY COIL RATED 60 VOLTS, 60 CYCLES. COIL RESISTANCE 3.0 OHMS DC. 3 MAKE AND TWO BREAK CONTACTS RATED 5 AMPS, 220 VOLTS AC.

* TBU, TBU-1, 2, 3.
 5/28/41 FRAME S#1228471 T-7606174-28
 NOV. 41 COIL S#1128913 SUB. 13

CAY 29130 * SEE BELOW
 RELAY COIL RATED 60 VOLTS DC. COIL RESISTANCE 330 OHMS DC. 3 MAKE AND TWO BREAK CONTACTS RATED 5 AMPS, 220 VOLTS AC.

* TBU, TBU-1, 2, 3.
 5/28/41 FRAME S#1228471 T-7606174-30
 NOV. 41 COIL S#897943 SUB. 13

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CSZ 29131 SD
RELAY
OPEN TYPE, 2 POLE CONTACTOR, RATED 15 AMP, 115 VOLTS, 60 CYCLES. COIL RESISTANCE 43 OHMS AT 60 CYCLES.

6/2/41 CLASS 8502 CRV:M-421642
MAR. 42 TYPE R-0-20 SUB 0

CSZ 29132 SD
OVERLOAD RELAY;
SINGLE BREAK, NORMALLY CLOSED, MANUAL RESET, INSTANTANEOUS TRIP. CONTACTS RATES 5 AMP AT 115 V, 60 CYCLES. COIL RESISTANCE 137 OHMS DC ADJUSTABLE FOR OPERATION FROM 0.19 TO 0.43 AMP DC. DC CONTACT RATINGS ARE TO BREAK 0.4 AMP AT 6/2/41 * SEE OH DTI- CRV:M-420643-5
MARCH 42 ER CARD SUB 6

230 V OR 1 AMP AT 115 V. CSZ 29132

* CLASS 9055, COIL 739-S26-W48

CRY 29133 23211 (TBT)
CONTROL RELAY
TWO SPST NORMALLY OPEN & ONE SPDT;
SINGLE BREAK PER CIRCUIT. COIL RATED 8.5 TO 15 VOLTS DC (NORMALLY 12), 8400 TURNS #31EC, 200 OHMS DC.

7/3/41 A-3144 CRV:K-865593-1
NOV. 41 SUB. 0

CHN 29134 SC, SD
RELAY
SINGLE POLE CIRCUIT BREAKER. INSTANTANEOUS TRIP, 12.5 AMP, 110 VOLTS, 60 CYCLES.

7/5/41 P-0111 CRV:M-421644-2
AUG. 42 SUB 1

CSZ 29135 TBL-4
RELAY
DPST, SINGLE BREAK, NORMALLY OPEN. COIL RATED 115 VOLTS DC + 45%-23%; 4250 OHMS DC RESISTANCE. CLOSE AT 19.3 MA AT 82 V DC. MAXIMUM COIL RATING 39.4 MA AT 167 V. DC. CONTACTS RATED 6 AMP 110 V. DC. # COIL:1305-S1-W38
7/23/41 CLASS:7311 K-860238-4
NOV. 41 SEE ABOVE REV. 5

3 AMP, 220 VOLT DC, 15 AMP, 29135
110 VOLT, 60 CYCLES.

CSZ 29136 TBL-4
RELAY
4PST SINGLE BREAK, NORMALLY OPEN. COIL RATED 90 V. DC + 45%-23%, 1650 OHMS DC RESISTANCE. MAX. RATING 66 MA AT 104 V. DC. MIN. 33 MA AT 52 V. DC. CONTACTS RATED 3 AMP 110 V. DC, 1.5 AMP 220 V. DC, 6 AMP 110 V. 60 CYCLES.
7/22/41 CLASS:7911-K M-420465-3
NOV. 41 COIL:1305-S1-K36REV. 6

CAY 29137 TBL-5
RELAY (OVERLOAD): SPST,
SINGLE BREAK, NORMALLY CLOSED. OPERATING COIL RATED .1 TO .4 AMPS, 64 OHMS DC RESISTANCE. RESET COIL RATED 115 VOLTS DC. CONTACTS RATED .5 AMP 230 VOLTS AC/DC. OPERATING COIL S#1158883, RESET COIL S#1158887

7/23/41 MN T-7607037-5
JUNE 42 S#1161103 SUB 8

CAY 29138 TBL-5
RELAY (OVERLOAD): SPST,
SINGLE BREAK, NORMALLY CLOSED. OPERATING COIL RATED .1 TO .4 AMP, 64 OHMS DC RESISTANCE. RESET COIL RATED 230 VOLTS DC. CONTACTS RATED .5 AMP, 230 VOLTS AC/DC. OPERATING COIL S#1158883, RESET COIL S#1158888.

7/23/41 MN T-7607087-6
JUNE 42 S#1161104 SUB 8

CAY 29139 TBL-5
RELAY (OVERLOAD)
SPST, SINGLE BREAK, NORMALLY CLOSED. OPERATING COIL RATED 0.1 TO 0.4 AMP, 64 OHMS DC RESISTANCE. RESET COIL RATED 115 V 60 CYCLES. CONTACTS RATED 0.5 AMP, 230 V AC OR DC. OPERATING COIL S#1158883. RESET COIL S#1158889.

7/23/41 MN, S#1161105 T-7607087-7
JUNE 42 SUB 8

CAY 29140 TBL-5
RELAY (OVERLOAD)
SPST SINGLE BREAK, NORMALLY CLOSED. OPERATING COIL RATED 0.5 TO 2 AMP, 2.5 OHMS DC RESISTANCE. RESET COIL RATED 115 V. DC. CONTACTS RATED 0.5 AMP 230 V. AC/DC. OPERATING COIL S#1158885, RESET COIL S#1158887.

7/23/41 MN T-7607087-8
JUNE 42 S#1161106 SUB. 8

CAY 29141 TBL-5
RELAY (OVERLOAD)
SPST SINGLE BREAK, NORMALLY CLOSED. OPERATING COIL RATED 0.5 TO 2 AMP, 2.5 OHMS DC RESISTANCE. RESET COIL RATED 230 V. DC. CONTACTS RATED 0.5 AMP 230 V. AC/DC. OPERATING COIL S#1158885, RESET COIL S#1158888.

7/23/41 MN T-7607087-9
JUNE 42 S#1161107 SUB. 8

CAY 29142 TBL-5
RELAY (OVERLOAD)
SPST, SINGLE BREAK, NORMALLY CLOSED. OPERATING COIL RATED 0.5 TO 2 AMP, 2.5 OHMS DC RESISTANCE. RESET COIL RATED 115 V, 60 CYCLES. CONTACTS RATED 0.5 AMP, 230 V AC OR DC. OPERATING COIL S#1158885. RESET COIL S#1158889.

7/23/41 MN, S#1161108 T-7607087-10
JUNE 42 SUB 8

CBM 29143 NJ-3
FUSE RELAY BOX
CONTAINS FUSES FOR INPUT AND OUTPUT CIRCUITS. STARTING RELAY, FILTER CAPACITORS IN THE DC INPUT CIRCUIT. TWO FUSES RATED AT 10 AMP 250 VOLTS, TWO RATED AT 50 AMP 24 VOLTS. RELAY COIL RATED FOR OPERATION AT 24 VOLTS DC.

8/5/41 777F CBM:SK-4897
NOV. 41 ALT. 1

CLR 29144 DP-17
RELAY
DPST, SINGLE BREAK. COIL 45 TO 55 CYCLES, 5.4 V AC MIN., 7.5 V AC MAX., 345 TURNS #23E WIRE, 1.75 OHMS DC RESISTANCE. CONTACTS RATED 2 AMP AT 110 V AC OR DC NON-INDUCTIVE LOAD.

9/3/41 L-131 CRV:K-854724-2
MAR. 42 COIL 364-A REV 5

CLR 29145 DP-16
RELAY
DPST, SINGLE BREAK. COIL 25 CYCLES, 5.4 V AC MIN., 7.5 V AC MAX., 670 TURNS #26E WIRE, 7 OHMS DC RESISTANCE. CONTACTS RATED 2 AMP AT 110 V AC OR DC NON-INDUCTIVE LOAD.

9/3/41 L-131, CRV:K-854724-3
DEC. 41 COIL 367-A REV 5

CLR 29146 DP-14
RELAY
TWO SPST, SINGLE BREAK, ONE TO MAKE WHILE THE OTHER (B+) BREAKS. COIL FOR DC OPERATION, 5.4 V DC MIN., 7.5 V DC MAX., 1300 TURNS #29 E WIRE, 24 OHMS DC RESISTANCE. CONTACTS RATED 2 AMP AT 110 V AC OR DC NON-INDUCTIVE LOAD.

9/3/41 L-131, COIL 354 CRV:K-854724-4
DEC. 41 REV 5

CSZ 29147 YE-1
RELAY (OVERLOAD):
SPST SINGLE BREAK NORMALLY CLOSED TIME DELAY MANUAL RESET. CONTACTS RATED 0.4 AMP AT 230 V DC 1 AMP AT 115 V DC. 5 AMP AT 115 V AC, OIL DASHPOT. MAX. SETTING (1.25 AMP) PULL IN 1.24 AMP. DROP OUT 0.08 AMP. MIN. SETTING (0.62 AMP) PULL IN 1/19/41 EQ-753 CRV:M-420648-1
APR. 42 SUB 6

IN 0.70 AMP DROP OUT 0.08 CSZ29147
AMP. ADJUSTABLE BY SCREW-
ING PISTON STEM. COIL RESISTANCE 5.38 OHMS, 930 TURNS #21 ENAMEL WIRE. SQUARE D COIL NO. 739-S26-W21.

CSZ 29148 YE-1
RELAY (OVERLOAD):
SPST SINGLE BREAK NORMALLY CLOSED TIME DELAY MANUAL RESET. CONTACTS RATED 0.4 AMP AT 230 V DC, 1 AMP AT 115 V DC, 5 AMP 115 V AC, OIL DASHPOT. COIL RATINGS 37.5 OHMS DC RESISTANCE, MAX. SETTING (.44 AMP) PULL IN .45 AMP. DROP OUT, 1/19/41 EQ753 CRV:M-420648-2
APR. 42 SUB 6

0.055 AMP MIN. SETTING CSZ29148
(.22 AMP) PULL IN .25
AMP DROP OUT .055 AMP SQUARE D COIL #739-S26-W25, 2650 TURNS OF NO. 25 ENAMEL WIRE. ADJUSTABLE BY SCREWING PISTON STEM.

CRV 29149 YE-1
RELAY (KEYING)
DPST DOUBLE BREAK PER CIRCUIT. NORMALLY OPEN. TERMINALS ARE PROVIDED FOR ONE POLE ONLY. COIL RATED 87 MA AT 48 V DC. CONTACTS RATED 2 AMP AT 500 V AC, 1 AMP AT 400 V DC. RELAY CAPABLE OF KEYING 100 WORDS PER MINUTE. COIL HAS 7220 TURNS
1/19/41 CRV:P-720395-
APR. 42 501 SUB 4

#36 ENAMEL WIRE, RESIST- CRV29149
ANCE 55 OHMS. LEACH COIL
#256.

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CKU 29150 YE-1	11/19/41	223C-38 APR. 42	CSD 29155 CXBE GEN. USE	21/5/41	TD97 OCT. 42	CRY 29151 WEA-1	2/25/42	F APR. 42
RELAY (MONITOR): SPDT SINGLE BREAK COIL RATED APPROXIMATELY 5 MA AT 10 V DC. CONTACTS RATED 2 AMP AT 110 V, NON-INDUCTIVE LOAD. KURMAN COIL #C-158, 15000 TURNS OF #38 ENAMEL WIRE, RESISTANCE APPROX. 2000 OHMS.		CRV:K-843820-2 SUB 10	RELAY: THERMAL TIME RELAY COIL 110 VOLTS, 60 CY. 5000 TURNS #38 ENAM WIRE, 605 OHMS DC. CONTACTS RATED 110 VOLTS, 60 CY. 6 AMPS. DELAY ADJUSTABLE FROM 5 SECONDS MINIMUM TO 2 MINUTES MAXIMUM			RELAY: OPERATING VOLTAGE 50 V DC. OPERATING CURRENT .0045 AMP. OPERATING WAITS .2 WATTS. MUST BE ABLE TO STAND 1.2 WATTS CONTINUOUS. COIL 57,500 TURNS #40 EC WIRE, 11500 OHMS DC RESISTANCE. CONTACTS MU SNAP-ACTION, SPDT, NORMALLY OPEN RATED 125 V AC AT 10 AMPS.		CRV:M-422350-1 SUB 1
CSZ 29151 YE-1	11/19/41	EQ 754 APR. 42	CRY 29156 TBY & TBY-1					CRY29161
RELAY (TIME DELAY): SPST SINGLE BREAK NORMALLY OPEN TIME DELAY, AUTOMATIC RESET, COIL 115 V 60 CYCLES AC CONTACTS RATED .4 AMP AT 250 V DC 1 AMP AT 115 V DC 10 AMP AT 115 V AC. OIL DASHPOT. TIME DELAY 15 TO 45 SECONDS. COIL SQUARE D NO. 750-578-W27.		CRV:M-420649-1 SUB 0	RELAY: MULTICIRCUIT ONE SPST NORMALLY OPEN ONE SPST NORMALLY CLOSED AND THREE SPDT (MAKE & BREAK). COIL RATED 3 V (NORMAL) AT 0.075 AMP DC (2.1 V MINIMUM) CONTACTS RATED 3 AMP, 150 WATTS ON NON-INDUCTIVE					MU SWITCH IS MANUFACTURER'S TYPE B-10271
RESISTANCE 90 OHMS, 3800 TURNS OF #27 ENAMEL WIRE.		CSZ29151	LOAD.			CCE 29162 WEA-1	2/25/42	28202 JUNE 42
CAO 29152 YE-1	11/19/41	362 JUNE 42	CRY 29156-A TBY-4 & TBY-6	NOV. 43		RELAY: COIL RATED 110 VOLTS, 60 CYCLES. 50% DUTY CYCLE, 30 OPERATIONS PER MINUTE MINIMUM, 1/4" MINIMUM PLUNGER TRAVEL TO CLOSE. COIL RATED CURRENT IS .14 AMP. WIRE SIZE IS #31, 4800 TURNS, 166 OHMS DC RESISTANCE.		CRV:W-305420-96 SUB 0
RELAY (MOTOR DRIVEN) TIME DELAY: DPST, NORMALLY OPEN, SINGLE BREAK, MOTOR DRIVEN, TIME DELAY. COIL RATED 115 VOLTS 60 CYCLES AC. CONTACTS RATED 4 AMPS. TIME DELAY IN MINUTES 1-1/2 MIN, 12-1/4 MAX. BRAKE COIL 750 OHMS DC RESISTANCE. RELAY COIL 680 OHMS		CRV:M-422311-1 SUB 0						
DC RESISTANCE. CONTACTS RATED 4 AMPS 115 VOLTS 60 CYCLES, 1 AMP AT 24 VOLTS DC.		CAO29152	CSD 29157 GENERAL USE	1/17/42	CS-1410 EXCEPT JUNE 42 FOR 115 VDC;CAT:			
CSZ 29153 YE-1	11/19/41	APR. 42	RELAY, FOUR POLE: DOUBLE THROW, SINGLE BREAK. CONTACTS RATED .5 AMPS AT 115 VOLTS DC. COIL FOR 115 VOLTS DC. ASSIGNMENT INCLUDES METAL COVER TO ENCLOSE THE UNIT.			CHN 29163 SD	3/12/42	*SEE ABOVE AUG. 42
RELAY: 3PST NORMALLY OPEN, SINGLE BREAK PER CIRCUIT. COIL VOLTAGE 115 V +10% -15% 60 CYCLES. CONTACTS RATED 15 AMP, NON-INDUCTIVE LOAD AT 115 OR 250 V AC, AND .6 AMP NON-INDUCTIVE LOAD 115 V DC 3 AMP NON-INDUCTIVE AT 230 V DC. COIL SQUARE 11/19/41 CLASS 8511 K-3		CRV:M-420647-2 SUB 1				RELAY OVERLOAD: SINGLE POLE CIRCUIT BREAKER, TIME DELAY TYPE. RATED 15 AMPS, 110 VOLTS, 60 CYCLES. COIL 15 TURNS #1 WIRE, DC RESISTANCE .004 OHMS.		CRV:M-421644-1 SUB 3
D NO. 1267-S1-W33, 2500 TURNS #33 ENAMEL WIRE, RESISTANCE 174 OHMS.		CSZ29153	CHN 29158 SA	1/30/42	*SEE ABOVE AUG. 42			
CSZ 29154 YE-1	11/19/41	APR. 42	RELAY: TIME DELAY MOTOR DRIVEN. SPST CONTACTS RATED 6 AMPS AT 115 VOLTS 60 CYCLES. TIME DELAY: 10 SECONDS. MOTOR RATED 115 VOLTS 60 CYCLES 3.2 WATTS. CLUTCH COIL OPERATES FROM 115 VOLTS 60 CYCLES. DC RESISTANCE 120 OHMS 4000 TURNS #30 ENAMEL WIRE.			CAN 29164 QFA	3/19/42	811942 REV 0
RELAY: 3PST NORMALLY OPEN SINGLE BREAK PER CIRCUIT. COIL VOLTAGE 230 V DC +10% -15%. CONTACT RATINGS 15 AMPS 115 V OR 250 V AC. DC CONTACTS 6 AMPS 115 V DC AND 3 AMPS AT 230 VOLTS DC. COIL SQUARE D NO. 1305-S1-W40, 3500 TURNS #40 ENAMEL WIRE, RESISTANCE 11,600 OHMS.		CRV:M-420647-1 SUB 1				TIME DELAY RELAY: SYNCHRONOUS MOTOR TYPE, OPERATES FROM 115 V SINGLE PHASE, 60 CYCLES. HAS THREE CONTACTS, EACH RATED 5 AMP, 115 V, 60 CYCLES. ONE CONTACT CLOSING WHEN OPERATING PUSH BUTTON IS PRESSED, OTHER TWO CIRCUITS CLOSE AFTER TIME DELAY OF FROM		811942 REV 0
			CLR 29160 WEA-1	2/25/42	1024-A AUG. 42			
			RELAY: SPST SINGLE BREAK, NORMALLY OPEN. CONTACTS TO CLOSE AT 60 MA DC. TO OPEN AT 35 MA DC. CONTACTS RATED 4 AMPS 115 VOLTS AC. COIL: 100 OHMS DC RESISTANCE, 2600 TURNS #32 WIRE.					
						CAN 29164A QFA-1	11/1/42	811942 REV 0
						FIRING TIMING RELAY: SYNCHRONOUS MOTOR TYPE, OPERATES FROM 115/1/60. HAS THREE CONTACTS, EA. RATED 5 AMPS, 115 VOLTS, 60 CY. ONE CONTACT CLOSING WHEN OPERATING PUSH BUTTON IS PRESSED, OTHER TWO CIRCUITS CLOSE AFTER A TIME DELAY OF FROM 0 TO 80 SECONDS.		

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CHN 29165 SA			CFT 29171 YA-1			29175 Q8C		
OVERLOAD CONTACTOR: 2 POLE, 115 VOLTS AC, 60 CYCLES, 15 AMPS. 2 OVERLOAD COILS, TIME DELAY PER CURVE C. COILS CONSIST OF 30 TURNS OF #12 ENAMELED WIRE, DC RESISTANCE .012 OHMS. (APPROX) HAS COUNTERBALANCE FOR 250G SHOCK TEST. 4/11/42 0322-15 AUG. 42		CRV:M-421670-3 SUB 3	RELAY PANEL: INPUT: 50 VOLTS, 2.5 AMPS DC, 125 WATTS. CONSISTS OF 3 NORMALLY OPEN SINGLE POLE, ONE NORMALLY OPEN SINGLE POLE, AND ONE NORMALLY CLOSED SINGLE POLE, ONE NORMALLY CLOSED SINGLE POLE, AND ONE NORMALLY OPEN DOUBLE POLE MERCURY CONTACT 5/8/42 112A NGV. 43 112B			RELAY: 4PDT 60 CYCLE COIL 6/26/42 AUG. 42		
CHN 29166 SA			RELAYS RATED 20 AMPS 115 VOLTS NON-INDUCTIVE LOAD.	CFT 29171		CAO 29176 SG		
OVERLOAD CONTACTOR: 2 POLE, 115 VOLTS AC, 60 CYCLES, 30 AMPS, 2 OVERLOAD COILS TIME DELAY PER CURVE C. COILS CONSIST OF 15 TURNS #9 ENAMELED WIRE DC RESISTANCE .0037 OHMS (APPROX). HAS COUNTERBALANCE FOR 250G SHOCK TEST. *0322-30 (BACK CONNECTED) 4/11/42 *SEE ABOVE AUG. 42		CRV:M-421670-1 SUB 3				RELAY: TIME DELAY UNIT WITH AUXILIARY RELAY. CONSISTS OF TWO RELAYS 35L14/35L15 WITH 450/750 OHMS DC RESISTANCE, 5300/7300 TURNS #36 ENAM/37 ENAM WIRE, 3.35/1.23 WATTS CONSUMED. INPUT 115 VAC, 60 CY. CONTACTS RATED AT 4 AMPS, 0 TO 105 SECONDS TIME DELAY. DPST 7/10/42 K-41184 MAR. 43		CRP:DUG71-5001 REV 0
CHN 29167 SA			CHO 29172 YA-1			CBZ 29177 SG		
OVERLOAD CONTACTOR: 2 POLE, 115 VOLTS AC, 60 CYCLES, 10 AMPS, 2 OVERLOAD COILS, TIME DELAY PER CURVE C. COILS CONSIST OF 44 TURNS OF #14 ENAMELED WIRE DC RESISTANCE .025 OHMS (APPROX) 4/11/42 0322-10 JUNE 42		CRV:M-421670-2 SUB 3	LINK CIRCUIT RELAY: SPDT SINGLE BREAK, NORMALLY CLOSED TO RIGHT SIDE, 2 FIELD COILS IN SERIES RATED 55 VOLTS DC ±18%. 3400 TO 3600 OHMS MAXIMUM RATING 19 MA AT 130 V DC. MINIMUM RATING 12 MA AT 90 V DC. TWO ARMATURE COILS IN PARALLEL EACH RATED 5/8/42 2-B NOV. 43		CHO:2-B SPECIAL CFT:RA-1925-14A	OPERATES FROM 110 V, 60 CYCLES. THREE POLE SINGLE THROW, NORMALLY OPEN. 10 AMPS CONTACTS. ASSIGNMENT DOES NOT INCLUDE MOUNTING BRACKETS. COIL DATA: 62 OHMS DC RESISTANCE, 1450 TURNS #31 ENAM CBZ:BUL. NO. 702, Y-4056-D REV 3 7/10/42 CBZ:835568 MAR. 43		SEE ABOVE
CAO 29168 RADAR MK. 10			110 V DC ±18%, 2115 TO 2215 OHMS, MAXIMUM RATING 61 MA AT 130 V DC, MINIMUM RATING 40 MA AT 90 V DC, CONTACTS RATED 5 AMPS, 110 V AC, OPERATING SPEED 10 CYCLES PER SECOND (25 WORDS PER MINUTE).	CHO 29172		CBZ 29177		
AC MAGNETIC CONTACTOR: RATED 5 HP, 450 VOLTS AC, 20 AMPS FOR 8 HOURS CONTINUOUS. SOLENOID OPERATED, TOP CONNECTED. ARC IS CONFINED TO INDIVIDUAL POLE BY BARRIERS OPEN AT THE BOTTOM ONLY. OPERATING COIL (WARD LEONARD TYPE 79L3) RATED 450 VOLTS, 175 4/13/42 CAO:H60-1 AUG. 43		CAO:15135.33A				WIRE .204 AMPS, 2.37 WATTS CONSUMED.		
CAO 29168			CZR-CW29173 ZB-2 & ZB-3			CLR 29178 SG		
OHMS DC RESISTANCE. AUXILIARY CONTACTS RATED NORMALLY OPEN 450 VOLTS 20 AMPS. NORMALLY CLOSED 5 AMPS CONTINUOUS AND 25 AMPS MAKE AND BREAK.			SWITCHING RELAY: INCLUDES A RELAY TO SWITCH THE RU SERIES RECEIVER FROM THE ANTENNA TO THE HOMOING ADAPTER OR VICE VERSA. SAME AS NAVY TYPE -29093 EXCEPT SUBSTITUTES A RECEPTACLE FOR USE WITH PT-5 TRANSMISSION CABLE. 5/23/42 JUNE 42			RELAY: 2 TO 120 V DC. COIL CONSUMPTION 2.25 WATTS, 15 MA DC., 5000 OHMS COIL, DPST, NORMALLY CLOSED. COIL DATA: 5000 OHMS DC RESISTANCE, 15,500 TURNS OF #41 ENAM WIRE, .015 AMPS DC, 1.25 WATTS CONSUMED. 7/10/42 CLR:1075-BF MAR. 43		CLR:LC-2001 REV 0
CAY 29169 T8L-7			CG-29174 T8C-4			CLR 29179 SG		
KEYING RELAY: 4 PST. DOUBLE BREAK, 3 POLES NORMALLY OPEN AND ONE POLE NORMALLY CLOSED. COIL RATED 50 TO 100 VOLTS DC, 740 OHMS, 100 WORDS PER MINUTE. EXCEPT FOR BASE PART AND SUPPORT BRACKET IS SAME AS CAY-29066. CONTACTS RATED 1/4 AMP, 2000 VOLTS. 4/19/42 OCT. 42		CAT:1-7604741-12, SUB 34	CONTACTOR UNIT: INCLUDES MAIN PLATE STARTING CONTACTORS AND RESISTORS AS WELL AS POWER AMPLIFIER VOLTAGE REGULATOR AND STARTING CONTACTORS. EQUIPMENT SUPPLY: 220/3/50-60. SIMILAR TO CG-29092 EXCEPT OPERATES FROM 50 TO 60 CYCLES. 5/28/42 CG:ML-766118703 NOV. 43		CG:T-7661187 REV 8	RELAY: 115 V, 60 CYCLES, 6 VA, DPST NORMALLY OPEN, CERAMIC BASE INCLUDED. ASSIGNMENT DOES NOT INCLUDE MTC, BRACKET. RELAY MUST NOT CHATTER FROM 105 - 125 V. COIL DATA: 530 OHMS DC RESISTANCE, 5500 TURNS #36 ENAM WIRE, 2.25 WATTS CONSUMED. 7/10/42 CLR:1174 MAR. 43		CLR:LC-2000 REV 0
CG 29170 SA			CG-29174-A T8C-5 T8C-3			CLR 29179A SG		
RELAY: OPEN TYPE, 3 POLE DOUBLE BREAK, 2 POLES NORMALLY OPEN AND 1 POLE NORMALLY CLOSED. CONTACTS RATED 10 AMPS AT 110 VOLTS 60 CYCLES, SINGLE PHASE, 1600 TURNS .0089E WIRE, 75 OHMS DC RESISTANCE. REQUIRES 145 VA TO CLOSE. WILL HOLD DOWN TO 24 VA. (CG SIZE 00). 5/5/42 CAT:4986342-G2 JUNE 42		CRV:M-422406-1 SUB 0	CONTACTOR UNIT INCLUDES MAIN PLATE STARTING CONTACTORS AND RESISTORS AS WELL AS POWER AMPLIFIER VOLTAGE REGULATOR AND STARTING CONTACTORS. EQUIPMENT SUPPLY: 220/3/50-60. SAME AS CG-29174 EXCEPT HAS ADDITIONAL TERMINAL BOARDS TO FACILITATE INTERNAL 12/31/43 HL766118704 AUG. 44			SAME AS CLR-29179 EXCEPT THAT THE ASSIGNMENT INCLUDES MOUNTING BRACKET. 7/10/42 CLR:1174 AUG. 42		
CG 29170			CG-29174-A			CLR 29180 SG		
FORM CR-2810-1809C			WIRING.			RELAY: 115 V, 60 CYCLES, 6 VA, DPST NORMALLY CLOSED, CERAMIC BASE. COIL DATA: 530 OHMS DC RESISTANCE, 5500 TURNS #36 ENAM WIRE, 2.25 WATTS CONSUMED. 7/10/42 CLR:1177BF MAR. 43		CLR:LC-1660 REV 0

Class 29—Electromagnetic Contact Devices

3.29-11

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CLR 29181 SG			CHANGED.		CCQ-29184-A	CAO 29190	* SEE BELOW	
RELAY:			FROM 92 TO 98 VOLTS AC.			MAGNETIC CONTACTOR:		
115 V. 60 CYCLES. 6 VA. DPDT WITH AUX DT CONTACT. CERAMIC BASE. COIL DATA: 530 OHMS DC RESISTANCE. 5500 TURNS #36 ENAM WIRE. 2.25 WATTS CONSUMED.						4 PST. CONSISTING OF A NORMALLY OPEN 3 PST SWITCH AND AN AUXILIARY CONTACT. NORMALLY OPEN. HIGH IMPACT. MAIN CONTACTS RATED 440 V AC. 25 AMPS AND 300 V. 2 AMPS DC. AUXILIARY CONTACT RATED 115		
7/10/42 CLR:1177-CBF		CLR:LC-1834				* RADAR MARK 10		
MAR. 43		REV 0				9/27/42 N-124		CW:KS-5958
						OCT. 42		ISSUE 1
CAY 29182 TBU-1,-2			CCQ 29185	* SEE BELOW		Y AC. 5 AMPS. COIL RATED	CAO 29190	
KEYING RELAY:			RELAY:			115 VOLTS. 60 CYCLES. 0.3 AMP. DC RESISTANCE IS 5.3 OHMS.		
3 MAKES AND ONE BREAK. TWO BREAKS PER CIRCUIT. COIL RATED 0.10 AMP AT 75 V DC. 1800 OHMS. BREAKS 10 WATTS AT 0.056 AMP. ELECTRICALLY THE SAME AS -29108 BUT IS 3/32" HIGHER AND FOR ADJUSTMENT REQUIRES ONLY A FRACTION OF THE TIME.			* RADAR MARK 8 AND SE					
7/19/42		CAY:T-7604741-	7/25/42 CW:KS-5910					
AUG. 42		IS SUB 38	AUG. 42 LIST 03					
CCQ 29183	* SEE BELOW		CCQ-29185-A MARK 13			CRV 29191	QCQ-2	
RELAY:			RELAY:			RELAY-JUNCTION BOX:		
COIL RATED 115 VOLTS. 60 CYCLES. 0.05 AMP WITH 3800 OHMS IMPEDANCE AND 495 OHMS DC RES. CONTACTS RATED 115 VOLTS. 10 AMPS AC. 0.5 AMP DC. 2 PDT. SAME AS -29185 EXCEPT FOR CHANGED IMPEDANCE AND DC RES. AND MINIMUM PICKUP ADJUSTMENT			COIL RATED 115 VOLTS. 60-. 0.09 AMPS WITH 1700 OHMS IMPEDANCE AND 280 OHMS DC RES. CONTACTS RATED 115 VOLTS. 10 AMPS AC. 0.5 AMPS DC 4PDT. SAME AS -29185 EXCEPT FOR CHANGED IMPEDANCE AND DC RES. AND MINIMUM PICKUP ADJUSTMENT			CONTAINS TWO RELAYS AND JUNCTION BLOCKS NECESSARY FOR OPERATION OF THETYPE CRV-10154 TRAINING UNIT.		
* RADAR MARK 8			9/20/44 B012A35-115		(CW)KS-5910			
7/23/42 CW:KS-5910			NOV. 44		LIST 03 ISS. 2			
AUG. 42 LIST 01						11/24/42 CRV:MI-8993A		CRV:W-306008-7
						MAY 43		SUB. 0
CCQ 29183-A MARK 13			CHANGED FROM 92 TO 98 VOLTS AC.			CAY 29192	SG	
RELAY						OVERLOAD RELAY:		
COIL RATED 115 VOLTS. 60-. 0.05 AMPS WITH 3000 OHMS IMPEDANCE AND 450 OHMS DC RES. CONTACTS RATED 115 VOLTS. 10 AMPS AC. 0.5 AMPS DC. 2PDT. SAME AS -29183 EXCEPT FOR CHANGED COIL IMPEDANCE AND DC RES. AND MTG. HOLES CHANGED FROM 0.130"						SPST. SINGLE BREAK. NORMALLY CLOSED. CONTACTS RATED 5 AMP CONT. AC OR DC INTERRUPTING CAPACITY 5 AMP. 115 V AC OR 1.5 AMP. 125 V DC. MAIN COIL: 8900 TURNS #31 COPPER ENAMEL WIRE. 0.04 TO 0.16 AMPS DC. 405 ± 25Ω DC RES. RESET COIL: 10/6/42 CAY:MH		CAY:1-D-2145
9/20/44 B0636A-115		CW:KS-5910 LIST				MAY 43		S#1210991
DEC. 44		16, ISS. 2. APP.5						
			CCQ-29183-A			CAY: 29192		
			TO 0.165".			115 V. 60 - DC RES. 101-116 Ω. 2400 TURNS #33 COPPER ENAMEL WIRE.		
			CJF 29186	CXBW				
			ANTENNA RELAY UNIT:					
			INCLUDES RELAY TO SWITCH ANTENNA FROM UHF TRANSMITTER TO UHF RECEIVER. GROUNDING UNIT NOT IN USE.					
			7/25/42 CJF:F-101-4					
			AUG. 42					
CCQ 29183-B MARK 13			CAO 29187	DAH.-1		CAY 29193	*SEE BELOW	
RELAY			RELAY:			AIRCIRCUIT BREAKER:		
COIL RATED 115 VOLTS. 60-. 0.05 AMPS WITH 3000 OHMS IMPEDANCE AND 450 OHMS DC RES. CONTACTS RATED 115 VOLTS. 10 AMPS AC. 0.5 AMP DC. 2PDT. SAME AS -29183-A EXCEPT MINIMUM PICKUP ADJUSTMENT IS CHANGED FROM 92 TO 98 VOLTS AC.			COIL RATED 6 V. 60 CYCLES. .95 AMP. SPST CONTACTS RATED 15 AMPS AT 115 V AC.			3 POLE. DEAD FRONT ENCLOSED. MANUAL. THERMAL OVERLOAD. 100 AMP FRAME. 250 V AC. 70 AMP TRIP.		
9/20/44 B06A36-115		CW:KS-5910.	8/1/42 CAT NO. 105-112 CFT:F-57217-1C			*FOR USE WITH EAF		
DEC. 44		LIST 01 ISS. 2	AUG. 43			11/28/42 TYPE A31		CAY:DIMENSION
						SEPT 45 MODEL D83270		SHT:29-530
CCQ 29184	* SEE BELOW		CLR 29188	SC-2 SC-3		CRY 29194	CAY:23304	
RELAY:			RELAY: 2 PDT PLUS SINGLE			RELAY:		
COIL RATED 115 VOLTS. 60 CYCLES. 0.09 AMP WITH 1600 OHMS IMPEDANCE AND 314 OHMS DC RES. CONTACTS RATED 115 VOLTS. 10 AMPS AC. 0.5 AMP DC. 3PDT. SAME AS -29184 EXCEPT FOR CHANGED IMPEDANCE AND DC RES. AND MINIMUM PICK-UP ADJUSTMENT			THROW NORMALLY OPEN. COIL RATED 115 ± 10 VOLTS. 60 ± 3 CYCLES. 330 MA. 500 OHMS MINIMUM RESISTANCE. CONTACTS RATED 1 AMP MAKE AND BREAK AT 110 VOLTS DC.			SPST. NORMALLY OPEN. COIL: 6300 OHMS DC RESISTANCE. 30,930 TURNS #40 WIRE. CONTACTS RATED AT 150 WATTS. 3 AMP AC NON-INDUCTIVE.		
* RADAR MARK 8			9/2/42 1357-59		CG:K-35J805	1/6/42 CRY:A-8035		CAY:M-7408481
7/23/42 CW:KS-5910			MAR. 43		REV 0 17R6	MAY 43		REV. 1
AUG. 42 LIST 02								
CCQ 29184-A MARK 13			CLR 29189	SC-2. SC-3		CAY 29195	*SEE BELOW	
RELAY			RELAY: 3 PST. NORMALLY			OVERLOAD RELAY-MANUAL		
COIL RATED 115 VOLTS. 60-. 0.09 AMPS WITH 1700 OHMS IMPEDANCE AND 280 OHMS DC RES. CONTACTS RATED 115 VOLTS. 10 AMPS AC. 0.5 AMPS DC 3PDT. SAME AS -29184 EXCEPT FOR CHANGED IMPEDANCE AND DC RES. AND MINIMUM PICK-UP ADJUSTMENT			OPEN. COIL RATED 115 ± 10 VOLTS. 60 ± 3 CYCLES. 230 MA. 500 OHMS MIN. RESISTANCE CONTACTS RATED 8 AMPS MAKE AND 5 AMPS BREAK AT 150 VOLTS AC.			RESET. SINGLE BREAK. NORMALLY CLOSED; ADJUSTABLE FOR OPERATION FROM 0. 75 TO 3.0 AMP DC. CONTACTS RATED 0.5 AMP. 230 V AC. OR DC. COIL 473 TURNS #20 TO 1.6 OHMS DC RESISTANCE. SAME AS-29096 *TAB-6.-74TBU-4		
9/20/44 B0-9A35-115		(CW)KS-5910	9/2/42 1358		CG:K-35J282	1/15/43 Mi:S-1164031		T-7607097-15
NOV. 44		LIST 02 ISS.	MAR. 43		REV 2 17R6	MAY 43		SUB 9

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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RESTRICTED

NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
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CAY29195
EXCEPT FOR COIL AND RANGE OF ADJUSTMENT.

CKU29200 MKII, MKII MOD I
RELAY, TIME-DELAY,
MOTOR-DRIVEN: OPEN TYPE, SINGLE POLE
SINGLE THROW NORMALLY OPEN. CONTACTS
RATED FOR ONE AMP AT 115 V 60 CY. MOTOR
RATED 115 V 60 CY, CONTINUOUS DUTY IN A
0° TO 75° C AMBIENT. MOTOR RESISTANCE
530 OHMS DC. TIME DELAY ADJUSTABLE
1/30/43 CKU:R-300 CRV:M-422748-1
AUG 43 SUB 6

CPK29207 QBC-1,QBD
SWITCHING RELAY:

2/5/43
MAY 43

CAY29196 *SEE BELOW
OVERLOAD RELAY-MANUAL
RESET: SPST, SINGLE BREAK, NORMALLY
CLOSED; ADJUSTABLE FOR OPERATION FROM
0.15 TO 0.60 AMP DC. CONTACTS RATED 0.5
AMP, 230 V AC OR DC COIL 2367 TURNS #27;
38 TO 43 OHMS DC RESISTANCE. SAME AS
#IAB-6,-7&TBU-4
1/15/43 HN:S:1164029 T-7607087-11
MAY 43 COIL:S:1164026

CKU29200
BETWEEN 30 SECONDS AND 60 SECONDS, ANY
ADJUSTMENT TO HOLD WITHIN 5 SECONDS.
RECYCLING TIME LESS THAN 2 SECONDS.
RELAY TO REMAIN CLOSED FOR A DROP OF ONE
SECOND DURATION IN LINE VOLTAGE TO 75 V.

CAO29208 SH
RELAY:
2 PST, NORMALLY OPEN. COIL RATED 115 V,
60 CYC, 0.13 AMP. IMPEDANCE IS 1030 OHMS.
DC RES. IS 102 OHMS. CONTACTS RATED 15
AMP AT 115 V DC OR 115 V, 60 CYC.

2/6/43 CW:KS-5909 CW:KS-5909
MAY 43 LIST 01 ISSUE 1

CAY29196

-29102 EXCEPT FOR COIL AND RANGE OF AD-
JUSTMENT.

CAE29201 MARK 8
RELAY-THERMAL OVERLOAD:
SPST, NORMALLY CLOSED, ADJUSTABLE DUPLEX,
INVERSE TIME LIMIT TYPE. CONTACTS RATED
5 AMP AT 115 V AC. RELAY ADJUSTABLE FROM
5 AMP MIN. TO 6 AMP MAX.

CAO29209 SH
RELAY:
4 PST, NORMALLY OPEN. COIL RATED 115 V,
60 CYC, 0.13 AMP. IMPEDANCE IS 1030
OHMS, DC RES. IS 102 OHMS. CONTACTS
RATED 15 AMP AT 115 V DC OR 115 V, 60
CYC.

2/6/43 CW:KS-5909 CW:KS-5909
MAY 43 LIST 02 ISSUE 1

1/31/43 CAE:10176 CW:KS-5930
MAY 43 ISSUE 1

CAY29197 TAB-6-7&TBU-4
OVERLOAD RELAY-MANUAL
RESET: SPST, SINGLE BREAK, NORMALLY
CLOSED; ADJUSTABLE FOR OPERATION FROM
0.35 TO 1.4 AMP DC. CONTACTS RATED 0.5
AMP, 230 V AC OR DC. COIL 1015 TURNS
#23; 6.5 TO 7.3 OHMS DC RESISTANCE.
SAME AS -29103 EXCEPT FOR COIL AND RANGE
1/14/45 HN:S:1164030 CAY:T-7607087-12
MAY 45 COIL:S:1164027

CAO29202 MARK 8
CONTACTOR:
MAGNETICALLY OPERATED, NORMALLY OPEN, 3
PST, SWITCH WITH AUXILIARY NORMALLY
CLOSED CONTACT. COIL RATED 4 AMP INITIAL
AND 0.4 AMP PLUNGER OPERATED AT 115 V
AC/DC, WITH 15 OHMS DC RES. MAIN CONTACTS
RATED 15 AMP AT 440 V AC, AUXILIARY CON-
1/31/43 CAO:N-83 CW:KS-5931
MAY 43 ISSUE 1

CG-29210 SH
RELAY-TIME DELAY:
INCLUDES RELAY (CC:TYPE CR-2620-1054MU)
AND SELENIUM HALF-WAVE RECTIFIER (CIL:
TYPE 400280). SPDT, NORMALLY OPEN. COIL
RATED 115 V, 60 CYC, 0.2 AMP. IMPEDANCE
AT 60- IS 2600Ω, DC RES. 200Ω. CONTACTS
RATED 10 AMP AT 115 V AC, 0.5 AMP AT 115
2/6/43 CW:KS-5912 CW:KS-5912
MAY 43 LIST 01 ISSUE 1

OF ADJUSTMENT.

CAY29197

TACT NORMALLY CLOSED.

CAO29202

CC-29210

VOLTS DC, TIME DELAY IS APPROX. 2 SEC-
ONDS.

CGE29198 SL
SOLENOID:
COIL RATED 110/60 CY. 3900 TURNS OF #31
WIRE WITH 150 OHMS DC RESISTANCE AND
1835 OHMS IMPEDANCE AT 60 CY. INITIAL
CURRENT IS 130 MA AND SEALED CURRENT IS
60/MA. PULL IS THREE OUNCES WITH MAXIMUM
STROKE OF 3/4".
1/28/43 CW:KS-5970
MAY 43 ISSUE 1.

CAO29203 MARK 8
SOLENOID:
PULL TYPE CONSISTING OF SINGLE OPERATING
COIL, A MOVABLE LAMINATED CORE AND A
MAGNETIC FIELD STRUCTURE. COIL RATED 110
V, 60 CYC AC. PLUNGER HAS MAX STROKE OF
1-1/4" AND PULL OF 14 LBS. COIL HAS 2
SECTIONS: #1 OF 358 TURNS OF #20 SCC
1/31/43 SIZE 5 CW:ES0-687099
AUG. 44 ISSUE 1

CRY29211 PD-1
RELAY:
DPST NORMALLY OPEN. COIL: 45.700
TURNS #39 EC. DC RESISTANCE 6500 OHMS.
CONTACT RATING 150 WATTS, 3 AMPS E.C.
COIL RATED 50 VOLTS, 7.7 MILS DC WITHOUT
SERIES RESISTANCE.
2/6/43 CRY:TYPE C #A- CRY:R7-539
AUG 43 11149;CCS:2-426 JULY 27, 1942

CKU29199 MKII, MKII MOD I
RELAY:
TWO SINGLE POLE DOUBLE THROW AND ONE
SINGLE POLE SINGLE THROW NORMALLY OPEN.
CONTACTS RATED 6 AMP, 115 V 60 CY. COIL
RATED FOR 115 V SINGLE PHASE 60 CY
OPERATION; 370 OHMS DC RESISTANCE WITH
4350 TURNS OF #35 ENAMEL WIRE. RELAY TO
1/30/43 CKU:S CRV:K-570114-1
AUG 43 SUB 6

WIRE AND #2 OF 179 TURNS OF #17EC WIRE.
COIL DC RESISTANCE IS 3 OHMS AND TEST
VOLTAGE IS 1200 V DC. SIMILAR TO NAVY
TYPE NO. -29254.

CAO29203

CAO29212 PD-1
RELAY:
DPST-NO. SILVER TO SILVER CONTACTS RATED
125 V 6 AMP. COIL:115 V, 33 MA, 60 CYC,
CONTINUOUS DUTY. DC RESISTANCE 1050 OHMS.

2/6/43 CAO:K-41208 CAO:26255-AE
MAY 43 CCS:8-409

REMAIN CLOSED FOR A DROP OF ONE SECOND
DURATION IN LINE VOLTAGE TO 75 VOLTS.

CKU29199

CSD29205 MARK 3 & 4
RELAY:
SPDT, 7 V, 4 MA, DC, 1500 OHMS COIL.
CONTACTS RATED 2 AMP AC, AND, 0.25 AMP
DC AT 110 V.

CAO29213 PD-1
RELAY:
SPDT SILVER CONTACTS RATED 110/220 V
2.0/1.5 AMP AC AND COIL RATED 2.03 V AT
6.76 MILS. DC RESISTANCE IS 300 OHMS.

2/2/43 28XAX038-DC CW:KS-5929
MAY 43 CW:KS-5929-L02 FIG 1

2/6/43 CAO:251-34 CATALOGUE
MAY 43 CCS:8-365 #251

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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Class 29—Electromagnetic Contact Devices

3.29-13

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CSZ 29214	-55ACX		CLR 29221	TCS-6		CG 29229	SN	
RELAY: OPEN TYPE, 5 POLE, DOUBLE BREAK, 3 POLES NORMALLY OPEN, TWO POLES NORMALLY CLOSED. CONTACTS RATED 10 AMP AT 110 V, 60 CYC. OPERATING COIL VOLTAGE IS 95 V, 60 CYC.			RELAY: DPDT AND SPST NORMALLY OPEN, RATED 12 V DC. RESISTANCE IS 67.0 OHMS. NOMINAL OPERATING TIME AT 12.0 V IS OPERATE: 0.019 SEC; RELEASE: 0.007 SEC. PULL-IN V IS 6.5 TO 7.5. DROP-OUT VOLTS IS 2.0 TO 3.5			RELAY, CURRENT SPDT. PULL IN AT 50 AMPS. ±10% DROP OUT AT 15 AMPS. RESISTANCE OF COIL IS .0002 OHMS. WINDING CONSISTS OF 3 TURNS OF #13 AWG.		
*COIL CLASS 8502 SIZE 00 2/19/43 CSZ:L-15 CRV:M-440257-1 MAY 43 *SEE A30VE SUB 0			5/19/43 CLR:1077-ABF CHZ:RL-1002 SEPT 43 REV A			9/29/43 CR2791-B-1000-35 CG:K44J-660 NOV. 43 REV 0		
CSZ 29215	-55ACX		CAO 29222	SQ		29230	TBY-6.7.8	
RELAY: OPEN TYPE, 5 POLE, DOUBLE BREAK, 5 POLES NORMALLY OPEN, CONTACTS RATED 10 AMP AT 110 V, 60 CYC. OPERATING COIL VOLTAGE IS 110 V, 60 CYC.			RELAY: SPST RATED 115 V AC, 1 AMP. COIL RATED 115/1760 AND HAS 800 OHMS RESISTANCE.			RELAY MULTI-CIRCUIT, ONE SPST, NORMALLY CLOSED AND 4 SPDT (MAKE AND BRAKE). COIL RATED 0.125 AMPS AT 3 VOLTS DC (2.1 VOLTS MINIMUM) CONTACTS RATED 3 AMPS 150 WATTS ON NON-INDUCTIVE LOAD. SAME AS -29156-A		
2/19/43 CSZ:L-13 CRV:M-440257-2 MAY 43 SUB 0			7/14/43 CG:K47J732 CG:K47J732 SEPT 43 REV 0			CR: CAFA: CRI:D-52529 10/25/43 CRI:D-52529 CRI:D-52515 REV A MAR. 44 ALT. A		
CSZ 29216	-55ACX		CGE 29223	SQ		29230		
RELAY: OPEN TYPE, 6 POLE DOUBLE BREAK, 3 POLES NORMALLY OPEN, 3 POLES NORMALLY CLOSED. CONTACTS RATED 10 AMP, 110 V, 60 CYC. OPERATING COIL VOLTAGE IS 110 V, 60 CYC.			RELAY: SPST MIDGET TYPE. CONTACTS RATED 0.01 AMPS, 300 V DC. COIL RATED: 8 VRMS, 60 CY, 1.14 AMPS MAXIMUM; 6.3 VOLTS, 60 CY NOMINAL; AND 4.5 V RMS, 60 CY, 0.64 AMPS MINIMUM.			EXCEPT FOR COIL AND CONTACTS.		
*COIL CLASS 8502 SIZE 00 2/19/43 CSZ:L-22 CRV:M-440257-3 MAY 43 *SEE ABOVE SUB 0			7/14/43 CGE#195 CG:K44J945 SEPT 43 REV 1					
CBM 29217	NJ-4		CG-29224	SN		CAE 29231	MK 1, MOD 2	
FUSE RELAY BOX: CONTAINS FUSES FOR INPUT AND OUTPUT CIRCUITS, STARTING RELAY, FILTER CAPACITORS IN THE DC INPUT CIRCUIT. SAME AS TYPE -29124 EXCEPT FUSED FOR 230 V OPERATION.			RELAY: SPDT DOUBLE BREAK. CONTACTS RATED 3.0 AMPS AT 115 V, 60 CY. PULL-IN AT 15 AMPS DC AND DROP-OUT AT 5 AMPS DC MINIMUM. DC RESISTANCE OF COIL IS 0.0083 OHMS.			RELAY CONTACTOR TYPE. RATING 50 AMPS. COIL 12 VOLTS D.C. COIL RESISTANCE, 27.06 OHMS.		
3/29/43 CBM:777H SK-4857 MAY 43 ALT 2			7/15/43 CG:CR2791B100C34 CG:K-44J158 SEPT 43 REV 0			10/29/43 BUL-6041-H30A CG:K-44J755 MAR. 44 REV 1		
CRR 29218	NX55-25012		CCQ 29225	MK-22		CAO 29232	MK 1, MOD 2	
RELAY UNIT: CONSISTS OF A STROMBERG CARLSON #865 RELAY AND 2 AEROVOX TYPE 480 2 MFD, 400 V DC WORKING PAPER CAPACITORS. USED FOR EMERGENCY OPERATION AS A CONTROL UNIT FOR ONE TRANSMITTER SIG. CORPS			4 PDT, 2.5 WATTS, 24 VOLTS DC, 0.106 AMPS, COIL RESISTANCE IS 230 OHMS. CONTACTS RATED 15 AMPS DC, NON-INDUCTIVE			RELAY DPST NORMALLY OPEN. RANGE -40°C TO 70°C. OPERATES 13V DC. NOMINAL OPERATING RANGE 16V TO 10V DC. COIL RESISTANCE 90 OHMS ± 10% AT 23°C.		
4/24/43 AC60926C AUG. 44			8/30/43 80-12-D-35 CW:9A-11755-5 NOV. 43 ISSUE 6			10/29/43 #26509.57 CG:K-52J280 NOV. 43 REV 0		
CRR 29218			CGX 29226	MK-12 17R6		CGX 29233	MK 1, MOD 2	
BC-640 AND ONE RECEIVER SIGNAL CORPIS BC-639 OVER APPROX 2 MI. OF SINGLE PAIR FIELD WIRE.			RELAY DPST NORMALLY OPEN. CONTACTS RATED .5 AMP AT 115 VOLTS AC. & .025 AMP. AT 125V D.C. TWO COILS HAVE TOTAL DC RESISTANCE OF 5000 OHMS ±7%. EACH COIL RATED 50 VOLTS DC, 10MA AND .5 WATTS AT PICKUP.			RELAY SPDT DOUBLE BREAK. TEMP. RANGE -40°C TO 70°C. POSITIVE CONTACT WITH 10V DC. COIL RATING 13 VOLTS, DC. NOMINAL COIL RESISTANCE NOT LESS THAN 70 OHMS. CONTACT CLOSED RATED 22 AMPS. AT 14V DC; CONTACT OPEN RATED AT 20 AMPS AT 14.5V DC.		
			9/1/43 27-D-5000R-2A CW:9A-10172-1 NOV. 43 ISSUE 3			10/29/43 #27 CG:K-44J916 NOV. 43 REV C		
CGE 29219	TCS-6		CACS 29227	GENERAL USE RE 29A100A		COB 29234	MK 1, MOD 2	
RELAY: SPST NORMALLY CLOSED. RATED 12.0 V DC NOMINAL 8.5 V MINIMUM OR UNFILTERED RECTIFIED 60 CY AC WITHOUT BUZZING. MIDGET TYPE. COIL RESISTANCE IS 74.0 OHMS.			RELAY UNIT RE 92678			RELAY ONE POLE, 3 POSITION. TEMP. RANGE -40° TO 70°C. COIL RESISTANCE 4000 OHMS PER COIL. COILS OPERATE IN CIRCUITS AT 500V DC.; CONTACTS MAKE/BREAK AT .5 AMP. AT 14V DC. MAX. CURR. DIFFERENTIAL IN THE TWO COILS OF 1.5 MA. OPERATES ARMATURE		
5/18/43 G-32950 CHZ:RL-1001 NOV. 43 REV A			9/8/43 MAR. 44			10/29/43 AYLZ-2018 CG:K-44J658 NOV. 43 REV 2		
CGE 29220	TCS-6		CGX-29228	NX30-20583		COB 29234		
RELAY: DPDT AND SPST NORMALLY OPEN RATED 8-14 V DC DR 8-14 RECTIFIED AC FULL WAVE. RESISTANCE IS 40.0 OHMS.			RELAY 3PDT. SILVER CONTACTS RATED 1/2 AMP, 90 VOLTS COIL RESISTANCE IS 800 OHMS. PULL-IN CURRENT IS 0.02 AMPS DC. AMBIENT TEMPERATURE RANGE IS -32°C TO 70°C			AND MAKE POS. CONTACT; MIN. CURR. DIFFERENTIAL OF .25 MA. DE-ENERGIZES COILS.		
5/18/43 CGE:G-35728 CHZ:RL-1002 SEPT 43 REV A			9/28/43 27-D-0201-3C CG:K-44J774 NOV. 43 REV 2					

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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RESTRICTED

NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CGE-29235	10/29/43 SER. 195 NOV. 43	MK 1, MOD 2 RELAY SPST NORMALLY OPEN. COIL RATED 6.5V DC. ± 1.5V. COIL RESISTANCE, 18 OHMS ± 1.8 OHMS. CONTACTS RATED .75 AMP. AT 14.5V. DC. CONTACTS MUST WITHSTAND 500V RMS. 60 CYCLES BREAKDOWN TEST. CG:K-44J801 REV 1	CG-29240	1/10/44 DL-4W407A FEB. 44	UE-1 ATTENUATOR UNIT INPUT: 115/1/60. OUTPUT: 250 V DC AT 50 MA. CONTAINS: POWER SUPPLY, TWO STAGES OF REMOTE SIGNAL ATTENUATOR, AND A GATE CONTROL TUBE.	CKU-29245	3/14/44 CKU:32505-39 AUG. 44	UE-1 RELAY DPST NO. RELAY CLOSURES AT 4.5 MILLIAMPS MAX. OPENS AT 1.5 MILLIAMPS MIN. COIL RESISTANCE 3000 OHMS. CONTACTS RATED 1/2 AMP. RESISTIVE AT 115 VOLTS AC. CG:K-54J945 REV 0
CAU-29236	11/7/43 CAU:H-77302-1 MAR. 44	0BB RELAY SPDT SINGLE BREAK. CONTACTS RATED 150 WATTS 3 AMP MAX. COIL 4520 TURNS OF #32 E WIRE, 125 OHMS ±5%. NOMINAL OPERATING CURRENT 48 MA AT 6V DC. OPERATING TIME 0.04 TO 0.06 SEC., RELEASE, TIME 0.03 TO 0.08 SEC. COIL INSULATION TESTED AT 11/7/43 CAU:H-77302-1 CHZ:302-110	CSD-29241	2/3/44 MIDGET TYPE 1BXX FEB. 44	QGC, QGD RELAY DPST SINGLE BREAK NORMALLY OPEN. COIL 605 OHMS DC RES RATED 115V 60 CYCLES, 92 MA MAX, ARMATURE OPEN; 54 MA MIN. ARMATURE CLOSED. CONTACT RATING 1 AMP 115V DC. 3 AMPS 220V 60 CYCLE, 6 AMPS 110V 60 CYCLE. 2/3/44 MIDGET TYPE 1BXX CBM:746-338 FEB. 44 ALT 0	CW-29246	4/4/44 D-163119A MAR. 45	UF RELAY: POLARIZED. TELEGRAPH. MOUNTS IN RELAY SOCKET NAVY TYPE CW-49539. SPDT, STATIONARY CONTACTS. CONTACTS RATED 200 MA AT 270V DC MAX. COIL CONSISTS OF 2 WINDINGS IN PARALLEL. 136 OHMS ± 10% DC RES. EACH WINDING OPERATES ON NOT LESS THAN 4/4/44 D-163119A BA-101018 ISS 2
500 V AC.		CAU29236	CBM-29241-A		NHC-1 RELAY DPST, DOUBLE BREAK, NORMALLY OPEN. CONTACTS RATED 6 AMPS 115V AC, 1 AMP, 115V DC INT, 3 AMPS 230V AC. COIL RATED 115V, 60 CYCLES; 5000 TURNS #38 WIRE; 605 OHMS DC RES. SAME AS -29241 EXCEPT FOR MIDGET TYPE 746-345 5/12/45 1BXX CBM:C-59 JUN. 45 COIL: "50A"9	CW-29246		0.00125 AMPS. DC WITH WINDINGS CONNECTED IN SERIES.
CHN-29237	11/10/43 P-0111 NOV. 43	SD-5 RELAY SINGLE POLE CIRCUIT BREAKER. OVERLOAD CURVE 3.115V 4 AMPS 60 CYCLE MIN. TRIP 8 AMPS CRV:M-421644 SUB 6	CBM-29241-A		FICATION TO 2 BREAKS PER CIRCUIT BY CBM.	CQ-29247	4/4/44 AS-3A6.3 MAR. 45	UF RELAY: COIL RATED 6.3V (5.5V PICKUP AND 7.5V MAX) 0.5 AMP AT 60 CPS, 18 OHMS IMPEDANCE 635 TURNS #28 E WIRE, 5.5 OHMS DC RES. CONTACTS RATED 5 AMPS 115V AC, 0.1 AMP, 115V DC, 2 AMP, 24V DC CONSISTS SPOT. 4/4/44 AS-3A6.3 KS-5819 FIG 1 MAR. 45 ISS 1
CCX-29238	12/13/43 AUG. 44	SP RELAY, ELECTRICAL TIME DELAY 6 PST, 4 POLES NORMALLY OPEN, 1 NORMALLY CLOSED. CONTACTS RATED 10 AMPS AT 110V 60 CYC. MOTOR DRIVEN, MOTOR RATED 115/1/60. TEN SECONDS ± 1 SEC AFTER BEING ENERGIZED 4 POLES NORMALLY OPEN, CLOSE AND 1 POLE NORMALLY CLOSED OPENS. 12/13/43 CG:K-54J187 AUG. 44 REV 3	CSD-29242	2/3/44 MIDGET TYPE 1BXX FEB. 44	QGC, QGD RELAY DPDT COIL 605 OHMS DC RES. RATED 115V 60 CYCLE, 92 MA MAX, ARMATURE OPEN; 54 MA MIN ARMATURE CLOSED. CONTACT RATING 1 AMP 115V DC, 3 AMP 220V 60 CYCLE, 6 AMPS 110V 60 CYCLE. 2/3/44 MIDGET TYPE 1BXX CBM:746-43 FEB. 44	CRV-29248	JULY 44	FOR USE WITH QCC-2 BDI ADAPTER: ADAPTS QCC-2 EQUIPMENT TO BEARING DIVISION INDICATORS, ACTING AS A KEYING RELAY FOR QCC-2 EQUIPMENT. CONSISTS OF A 6H6 TUBE FOR TRIGGERING A 2050 RECTIFIER TUBE, ISOLATING TRANSFORMER RELAY, ROTARY 4/29/44 MI-16771 M-307078 JULY 44 REV 0
CCX-29238		UNIT SHALL RESET 10 SECONDS ± 1 SEC AFTER OPENING CONTROL CIRCUIT. CCX29238	CAU-29243	2/23/44 CAU:H-77342-15 MAY 44	JR RELAY DPST MAKE NORMALLY OPEN. COIL 2500 OHMS DC RES. OPERATES FROM 7 TO 50 MILLIAMPS, 18-22 1/2 VOLTS. CONTACTS RATED 25 WATTS 1/2 AMP INDUCTIVE LOAD. HERMETICALLY SEALED, 12" PIGTAIL LEADS. CAU:ES-76-9349 ISSUE 1	CRV-29248		SWITCH AND ASSOCIATED CAPACITORS AND RESISTORS. SUPPLY: 115/1/60 25 WATTS. HXBT-44595
CCX-29239	12/28/43 27-D-0091-2C-12950 FEB. 44	SP RELAY DPDT CONT. DUTY CYCLE. OPERATES AT 9 MA OR LESS. RETURNS TO NORMAL AT 1 MILLIAMP. COIL RES., 500 OHMS. CAN CARRY 12 MA DC FOR DUTY CYCLE WITHOUT OVER-HEATING. CONTACTS HAVE RATING FOR LOW VOLTAGE HIGH IMPEDANCE CIRCUITS. CONTACTS TO 12/28/43 27-D-0091-2C-12950 CG:K-54J214 FEB. 44 REV 0	CW-29244	3/14/44 CW:7735-2-E FEB. 45	AN/ART-2 RELAY SPOT PLUS SHORTING SWITCH, NORMALLY OPEN, ENERGIZED CLOSED. CONTACTS AND SPACING SUITABLE FOR RF: 500 VOLTS (1200V PEAK) AT 0.1 AMP. (AVERAGE) TO 50 VOLTS (120V PEAK) AT 1.0 AMP (AVERAGE) UP TO 50,000 FEET AS USED IN MODEL AN/ART-2. RELAY 3/14/44 CW:7735-2-E CW:7735-2-E FEB. 45	CBM-29249	6/13/44 CBH:1017 AUG. 44	SU RELAY UNIT: DPST NORMALLY CLOSED. HOUSED IN 4 1/4" X 4 3/8" X 6 1/4" BOX WITH SUITABLE HTC BRACKETS AND A JUNCTION BOX. UNIT INCLUDES (CLR) #6105 RELAY POWERED BY 115V AC, 60 CYCLE, SINGLE PHASE, & CONTROLS APPROX. 200 WATTS OF POWER DRAWN FROM 6/13/44 CBH:1017 SK-6240 AUG. 44 ALT 0
CCX-29239		WITHSTAND 500V RMS 60 CYCLE BREAKDOWN TEST FOR 1 MINUTE. CCX29239	CW-29244		WILL OPERATE AT 18V DC IN ANY POSITION; ENERGIZING CURRENT 0.1 AMP. AT 18V DC TO 0.165 AMP. AT 29.15V DC; COIL RESISTANCE 175 OHMS. OUTSIDE DIMENSIONS 2 5/16" X 1 3/8" X 1 3/4". CBM-29249			EITHER 115 VOLTS AC OR 115 VOLTS DC SHIP'S LINE POWER.

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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Class 29—Electromagnetic Contact Devices

3.29-15

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CLR-29250	AN/APA-17		CHN-29256	UE-1		CG-29262	HK 20 MOD 2	
RELAY: FOR DEVELOPING MECHANICAL MOTION FROM ELECTRO-MAGNETIC COIL ACTION. COIL RATED 24V DC; 160Ω DC; 194 MA MAX AT 31V DC; 112 MA MIN AT 18V DC; 150 MA AT 24V DC. MADE WITHOUT CONTACTS. NO CONTACT RATING.	7/13/44 1000-A AUG. 44 355D COIL	CLR:LC-3098 REV A	CIRCUIT BREAKER: SINGLE POLE, NORMALLY CLOSED. AMBIENT TEMP. RANGE (-40°C TO +75°C). CONTACTS RATED TO BREAK 115V AC. TRIP TIME AT 10 AMPS./12.5 AMPS/20 AMPS/50 AMPS/100 AMPS IS CONTINUOUS HOLD/ 1.58 SEC TO 7.44 SEC/ 0.51 SEC TO 0.8 SEC/0.13 SEC TO 0.33 SEC/ 7/20/44 -0411	7/20/44 -0411	CG:K-54J677 REV 1	RELAY: SPST, NORMALLY OPEN. CONTACTS RATED 25 AMPS AT 26V DC, 25 AMPS AT 115V AC, AND 2.5 AMPS AT 115V DC. COIL RATED: 26V DC, 0.25 AMP DC, 138 OHMS DC RESISTANCE. MIN OPERATE 20 VOLTS DC MAX. OPERATE 29 VOLTS DC. TIME DELAY (SLOW RELEASE) 0.4	7/31/44 CR-2790 FEB. 45	CW:KS-15068 LIST 01 ISS 1
CAOX-29251	MAE-1		CHN-29256			CG-29262		
RELAY: RELAY OPERATES AT 0.3 AMPS. MAX. AT 6V DC HAS ONE SET SPDT. ONE SET OF SPST NORMALLY OPEN. AND ONE SET OF SPST NORMALLY CLOSED CONTACTS. CONTACT RATING: 5.0 AMPS. AT 220V AC OR DC.	7/14/44 R-30E AUG. 44	CKV:L-21446-1 REV 1	INSTANTANEOUS.			SEC. BETWEEN DISCONNECTING OPERATING CURRENT AND OPENING OF CONTACTS.		
CCQ-29252	HK 13		CG-29257	SC-4		CRY-29263	HK 31 MOD 0	
RELAY: DPDT COIL RATED 115V, 60-.070 AMPS MAX. 2000Ω IMPEDANCE, 685Ω DC RESISTANCE. PICKUP COIL 103V AC. MAX. COIL VOLTAGE 127V AC; CONTACTS 5 AMPS AT 115V AC, 0.1 AMPS AT 115V DC. 2 AMPS AT 24V DC.	7/14/44 BJC-6A-115 AUG. 44	CW:KS-5819 LIST 0 ISSUE 1	RELAY: DPDT SINGLE BREAK. CONTACTS RATED 12 AMPS. CONTINUOUS. INTERRUPTING RATING OF CONTACTS: NON-IND. 125 VOLTS DC, 3.0 AMPS NON-IND 115 VOLTS AC, 30.0 AMPS IND. 115 VOLTS AC, 20.0 AMPS IND. 125 VOLTS DC 1.0 AMPS. COIL RATED 115V AC + 10%. 7/25/44 12HGA 15 FIN P-7763835-1	7/25/44 12HGA 15 FIN AUG. 44	P-7763835-1 REV 2	RELAY: DPDT COIL RATED 22.0V DC MIN 28.5 VOLTS DC MAX. FOR OPERATION, APPROX. 300Ω DC RES. CONTACTS 18 GA. PALLADIUM RATED 2 AMPS, 100 WATTS. OPERATES IN AMBIENT TEMPERATURE OF -40°C MIN +70°C MAX.	7/31/44 D-8038 TYPE K AUG. 44	CW:BA-10059-6 ISSUE 9
CLR-29253	AN/APA-17		YG-29258	SC-4		CRY-29264	HK 31 MOD 0	
RELAY: 2 PDT COIL RATED 24V DC, 160Ω DC RESISTANCE. MAX RATING 194 MA. AT 31V DC, MIN 112 MA AT 18V DC. CONTACTS RATED 10 AMPS AT 24V DC OR LESS, 32 AMPS AT 110V DC, 6 AMPS 110V 60-.	7/15/44 1077-BFW AUG. 44 355D COIL	CLR:LC2037 REV 1	RELAY: OVERCURRENT, INSTANTANEOUS TRIP HAND AND ELECTRICAL RESET. ONE NORMALLY OPEN AND ONE NORMALLY CLOSED CIRCUIT. OPERATING COIL 4 AMPS. CONTINUOUS, CALIBRATED 3-4-6 AMPS. CONTACTS SINGLE BREAK CONTINUOUS RATING OF 5 AMPS. INTERRUPTING	7/25/44 12PBC1482N AUG. 44	P-7764071-3 REV. 6	RELAY: DPDT COIL RATED 22.0V DC 28.5V DC MAX. FOR OPERATION, 300 OHMS DC RES. CONTACTS 14 GA PALLADIUM RATED 4 AMPS 175 WATTS. WILL OPERATE IN AMBIENT TEMPERATURE OF -40°C MIN +70°C MAX.	7/31/44 A-8052 TYPE K AUG. 44	CW:BA-10059-8 ISSUE 9
CAO-29254	HK 8 MOD 2		CG-29258			CLR-29265	HK 31 MOD 0	
SOLENOID: PULL TYPE, CONSISTING OF SINGLE OPERATING COIL, A LAMINATED CORE AND A MAGNETIC FIELD STRUCTURE. COIL RATED AT 110 VOLTS, 60 CYCLES, INITIAL CURRENT 15.0 AMPS, SEALED CURRENT 1.2 AMPS. PLUNGER HAS MAX. STROKE OF 1 1/4". PULL AT MIN	7/17/44 SIZE 5 AUG. 44	CW:KS-5932 LIST 0 ISS 1 APP 1	CAPACITY OF CONTACTS AT 125 VOLTS NON-INDUCTIVE 10 AMPS AC AND 1.0 AMPS DC.			RELAY: 4 PST, 2 SETS NORMALLY OPEN, 1 SET NORMALLY CLOSED CONTACTS. SILVER PLATED. RATED 6 AMPS 115 VOLTS AC, 1 SET NORMALLY OPEN CONTACTS SILVER PLATED, RATED 2 AMPS 115V AC. COIL RATED 24V DC, 265 OHMS DC RESISTANCE, 1 1/2 WATTS.	7/31/44 2059 AUG. 44	CW:BA-10012-3 ISSUE 4
CAO-29254			CCQ-29259	HK 20 MOD 1		CLR-29266	AN/APA-17	
VOLTAGE IS 7.5 LBS COIL HAS 2 SECTIONS. #1 OF 330 TURNS OF #16G WIRE, AND #2 OF 165 TURNS OF #16G WIRE 2.1 OHM DC RES. SIMILAR TO NAVY TYPE -29203.			RELAY: 2 PDT, CONTACTS RATED 10 AMPS. @ 115V AC OR 24V DC, 0.5 AMPS @ 115V DC. COIL RATED 26V DC, 0.15 AMP, 230Ω DC RESISTANCE. MIN. OPERATE 18±.5V DC, MAX. OPERATE 29V DC.	7/31/44 B06D35 AUG. 44	CW:KS-5910 LIST 04 ISS 2	RELAY: 2 PDT, NO. OF BREAKS PER CIRCUIT IS 1. VOLTAGE RATING 18 TO 29V DC. COIL CURRENT 162 MA AT 26V DC. RELAY TO OPERATE ON 75% OF RATED VOLTAGE. COIL #355-0; 3420 TURNS, #33 E WIRE, 160 OHMS DC RES. AT 20° TO 30°C.	8/1/44 1087-WB NOV. 44	LC-2134
CBM-29255	NX3r-56805		CCQ-29260	HK 20 MOD 1		CSQ-29267	AN/ARQ-10	
KEYING RELAY ASSEMBLY: CONSISTS OF ONE RELAY (CBM TYPE 1000Z-15, DPDT, COIL RATED 75 VOLTS DC, CONTACT RATING 15 AMPS, 110 VOLTS AC, WITH SPST KEYING CONTACTS); MOUNTED ON A RELAY PLUG PANEL CONTAINING 9 BANANA TYPE PLUGS THE RELAY SUBSING 100Z-15 OR 746-11 IS	7/19/44 CBM:769-3043 AUG. 44	CBM:769-3043 ALT 0	RELAY: 3 PDT, CONTACTS RATED 10 AMPS. @ 115V AC OR 24V DC, 0.5 AMP @ 115V DC. COIL RATED 26V DC, 0.2 AMP, 160Ω DC RESISTANCE MIN. OPERATE 20V DC, MAX. OPERATE 24V DC.	7/31/44 B09D34 AUG. 44	CW:KS-5910 LIST 11 ISS 2	RELAY, THERMAL 10 AMP, NON-TRIP-FREE, THERMAL TYPE. RATING FOR 30V DC SERVICE. UNITS MAY BE USED ON 110-220V AC IF RUPTURING CAPACITY REQUIREMENTS ARE LIMITED, 200 HR. SALT SPRAY TEST ACCORDING TO AN-OQ-S-91.	8/2/44 C6363-2-10 NOV. 44	NCPI09-3B-17 REV 8
CBM-29255			CCQ-29261	HK 20 MOD 1		CSQ-29268	AN/ARQ-10	
ALSO ADVANCE ELECTRIC 400-1B.			RELAY: 4PDT, CONTACTS RATED 10 AMPS @ 115V AC OR 24V DC, 0.5 AMP @ 115V DC. COIL RATED 26V DC, 0.2 AMP, 160Ω DC RESISTANCE MIN. OPERATE 20V DC, MAX. OPERATE 28V DC.	7/31/44 B012034 AUG. 44	CW:KS-5910 LIST 14 ISS 2	RELAY, THERMAL: 8 AMP, NON-TRIP-FREE, THERMAL TYPE. RATING FOR 30V DC SERVICE. UNITS MAY BE USED ON 110-220V AC IF RUPTURING CAPACITY REQUIREMENTS ARE LIMITED, 200 HR. SALT SPRAY TEST ACCORDING TO AN-OQ-S-91.	8/2/44 C6363-2-8 NOV. 44	NCPI09-3B-16 REV 8

RESTRICTED

NAVSHIPS 900,109

3.29-16

Class 29—Electromagnetic Contact Devices

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CGX-29269	AN/ARQ-10		CHN 29275	UE-1		CLR-29283	ASA-1	
RELAY: DPST, NORMALLY OPEN, COIL RATED: 24-30V DC 350 OHMS. CONTACTS RATED 10 AMPS (a) 30V DC; 10 AMPS (a) 125V AC.			OVERLOAD RELAY DPST COIL RATED 65 AMP, 115V, 50-60 CYCLES AT 65, 81.25, 130, 145; 650 AMPS TRIPS AT. CONT. HOLD, 55 ±20, 12 6, 4 ±2, INSTANTANEOUS, SECONDS.			RELAY: SPDT, CONTINUOUS CYCLE, CONTACT RATINGS: 3 AMPS AT 28 VOLTS DC, COIL VOLTAGE 20-28.6 DC, RESISTANCE 265 OHMS.		
8/2/44 27-D-24V-2A CFT:HL27840-2 NOV. 44 SPEC #12890 REV G			8/18/44 AM-2511 CG:K-56J963 OCT. 44 REV 0			8/30/44 1018 OCT. 44		
CRY-29270	AN/ARQ-10		CKU 29276	ASA-1		CLR-29284	ASA-1	
RELAY: HERMETICALLY SEALED - OCTAL BASE - PLUS-IM TYPE, DPDT. RATED COIL 24-30V DC 300 OHMS, CONTACTS RATED: 400V DC AT 10 MA. METAL PARTS TO BE FINISHED TO PASS A THREE HOUR SALT SPRAY OR NOT EXCEEDING 2 AMPS TEST ACC TO AN-QO-S-91 WITHOUT			RELAY: CONTACT RATING 2 AMPS AT 110 VOLTS DC. COIL DC RESISTANCE 270 OHMS. DIMENSIONS: 2 5/8 X 2 5/8 X 1 9/16.			RELAY: DPST, NORMALLY OPEN, CONTINUOUS CYCLE, CONTACT RATINGS: 2 AMPS, 115 AC. COIL VOLTS 20-28.6, RESISTANCE 250 OHMS.		
8/2/44 SK-5010 CFT:HL28809-2 NOV. 44 REV E			8/30/44 223C34C OCT. 44			8/30/44 1074 OCT. 44		
CRY-29270			CLR-29277	ASA-1		CLR-29285	ASA-1	
EVIDENCE OF CORROSION 100 M UP TO 125V.			RELAY: DPST, NORMALLY OPEN CONTACT RATINGS: 4 AMPS AT 1.15 VOLTS D.C., COIL VOLTS 20 - 28.6 DC. DUTY CYCLE CONTINUOUS.			RELAY: SPST, DOUBLE BREAK, CONTINUOUS CYCLE, CONTACT RATINGS: 0.025 AMPS, 125 VOLTS D.C., COIL VOLTS 20-28.6 D.C., RESISTANCE 265 OHMS.		
			8/30/44 1024 OCT. 44			8/30/44 1601-MX OCT. 44		
CAGK-29271	AN/ARQ-10		CLR-29278	ASA-1		CPB-29286	ST	
RELAY-THERMAL TIME DELAY: SPST NO. HERMETICALLY SEALED IN VACUUM TUBE ENVELOPE. ACTION OF THERMAL TIME DELAY TYPE. HEATER RATED 24V DC NOMINAL. RELAY CLOSURE ON 19V MINIMUM. TIME DELAY 30±10 SECONDS AT 25°C. 20-45 SECONDS AT ANY TEMP. SIMILAR TO CAGK-29403, EXCEPT			RELAY: CONTACT RATINGS 2 AMPS AT 115V AC. CONTINUOUS CYCLE, CONTACTS: DPDT AND 1SPST NORMALLY CLOSED. COIL RESISTANCE, 250 OHMS.			SOLENOID, ROTARY: CONSISTS OF A SINGLE OPERATING COIL, CORE, AND A MAGNETIC FIELD STRUCTURE. MAGNETIC FIELD STRUCTURE IS STATIONARY WHILE CORE IS FREE TO ROTATE 30° WHEN COIL IS ENERGIZED. WHEN COIL IS DEENERGIZED THE CORE IS RETURNED TO ITS NORMAL POSITION BY MEANS OF AN EXTERNAL SPRING ASSOCIATED WITH THE UNIT. RATED AT 27 1/2V DC, 7 1/2" START, 2500 HBLD. TORQUE OF 16 INCH OUNCES. COIL IS IN TWO SECTIONS. SECTION 1 HAS 550 TURNS OF #27GA E WIRE, SECTION 2 HAS 1800 TURNS #36GA E WIRE.		
8/2/44 24-0630-10A CFI:NCP28-1-52 FEB. 45 ISS. C			8/30/44 10,778-BF OCT. 44			8/31/44 324 BTL:KS-15073-5 OCT. 44 CANCELLED ISSUE 1		
CAGK-29271			CLR-29279	ASA-1		CPB-29286		
FOR TERMINAL CONNECTIONS.			RELAY: DPST, NORMALLY OPEN, CONTACT RATINGS 6 AMPS 115 VOLTS AC, CONTINUOUS CYCLE, RESISTANCE 265 OHMS.			RELAY: SOLENOID, ROTARY: CONSISTS OF A SINGLE OPERATING COIL, CORE, AND A MAGNETIC FIELD STRUCTURE. MAGNETIC FIELD STRUCTURE IS STATIONARY WHILE CORE IS FREE TO ROTATE 30° WHEN COIL IS ENERGIZED. WHEN COIL IS DEENERGIZED THE CORE IS RETURNED TO ITS NORMAL POSITION BY MEANS OF AN EXTERNAL SPRING ASSOCIATED WITH THE UNIT. RATED AT 27 1/2V DC, 7 1/2" START, 2500 HBLD. TORQUE OF 16 INCH OUNCES. COIL IS IN TWO SECTIONS. SECTION 1 HAS 550 TURNS OF #27GA E WIRE, SECTION 2 HAS 1800 TURNS #36GA E WIRE.		
			8/30/44 1054 OCT. 44			8/29/44 1025-SNBF CWZESA-682944-1 FEB. 45 ISSUE 12		
CLR 29272	CH-211103-A		CLR-29280	ASA-1		CLR 29287	HK 20 MOD 1	
RELAY DPST, NORMALLY CLOSED, 115/1160, 6 VA. INCLUDES CERAMIC BASE BUT NO MOUNTING BRACKET. COIL CONSISTS OF 5500 TURNS OF #36 EN WIRE, 530 OHMS DC RESISTANCE. SAME AS -29179 EXCEPT CONTACTS ARE NORMALLY CLOSED INSTEAD OF NORMALLY OPEN.			RELAY: CONTACT RATINGS: 24 VOLTS D.C., 124 AMPS. RESISTANCE 100 OHMS, SPST, NORMALLY OPEN.			RELAY DPST, NORMALLY CLOSED, CONTACTS RATED 0.055 AMP, COIL RATED 22 VOLTS DC MINIMUM OPERATE, 28.5 VOLTS DC MAXIMUM OPERATE. 5300 TURNS OF #35 E WIRE, 425Ω DC RESISTANCE. RATED 0.061 AMPS AT 26 VOLTS DC.		
8/7/44 1175 OCT. 44			8/30/44 5050-ECR OCT. 44			9/29/44 1025-SNBF CWZESA-682944-1 FEB. 45 ISSUE 12		
CCQ 29273	CANU-23423		CLR-29281	ASA-1		ICSD-29288	CAGQ-66AFU-1	
RELAY CONSISTS OF 1 SPDT AND TWO SPST SETS OF CONTACTS, RATED 1 AMP AT 24V DC. COIL RATED 12V DC, 1 WATT, 150 OHMS, TO OPERATE BETWEEN 8.5 TO 15 VOLTS DC. CURRENT RATING 80 MA AT 12V DC.			RELAY: SPST, NORMALLY OPEN, ENCLOSED MAIN CONTACT, CONTACT RATINGS: 20-29 VOLTS D.C., 65 AMPS, RESISTANCE 100 OHMS.			RELAY: SPDT, DOUBLE BREAK NORMALLY OPEN, COIL RATED 115 VOLTS AC, OPERATED ON A MINIMUM OF 95 VOLTS, 60 CYCLES WITH RELAY VERTICAL, CONTACTS UP. POWER CONSUMPTION 4.2 WATTS MAX. WHEN OPERATED AT 60 CYCLES 115 VOLTS.		
8/9/44 TSL-CAA CANU:S-660-4 OCT. 44			8/30/44 5051-CR-G17 OCT. 44			10/2/44 CX3127 CHZ:RL-1007 NOV. 44		
CGX 29274	AN/ARQ-10		CLR-29282	ASA-1		CARE-29289	OCB	
RELAY DPDT. COIL RATED 24V DC MAX 30V DC COIL RESISTANCE 440 OHMS ±7% AT 25°C. CONTACT RATING .06A DC AT 300V DC AND .03A DC AT 300V DC.			RELAY: DPST, NORMALLY OPEN, 1SPST NORMALLY CLOSED, CURRENT 15% A.D.C., CONTINUOUS CYCLE, CONTACT RATING: 4 AMPS AT 115 VOLTS AC, RESISTANCE 10,000 OHMS.			RELAY DC: DPST, ONE NORMALLY OPEN, ONE NORMALLY CLOSED, CONTACTS RATED 0.1 AMP, 115V, 50-70 CPS, 5000 OHMS ± 10% DC RESISTANCE. MUST BE CAPABLE OF ADJUSTMENT SO THAT POLE PIECE WILL ATTRACT ARMATURE AT 8 MA AS CURRENT IS INCREASED FROM 0 TO 10		
8/11/44 270-24V-2C CFT:NL-28380-2H OCT. 44 ISSUE H			8/30/44 1024-B OCT. 44			10/18/44 LMR-S17 CML-25261 NOV. 44 ISS. 0		

Class 29—Electromagnetic Contact Devices

3.29-17

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
		CARE-29289 MA AND RELEASE ARMATURE AT 3 MA AS CURRENT IS REDUCED FROM 10 MA TO 0.			CAY-29293 CONTINUOUS.			CRY-29300 QJB RELAY, PLUG IN: 3 PST N.O. CONTACTS RATED 115V AC 4 AMPS NON-INDUCTIVE. COIL RATED 120V AC, 60 CPS, APPROX 0.1 AMPS, 4000 TURNS #34 GA FORMEX COPPER WIRE, 214 OHMS DC RESIS- TANCE. FITS OCTAL STYLE SOCKET. CH:KS-9675 ISS 1 10/24/44 C-8051 APP 1 CN:ESL-657680 NOV. 44 CN:KS-9675 ISS. 4
CAY-29290 TDE CONTACTOR: 4 PST, NORMALLY OPEN. CONTACTOR INCLUDES SPDT INTERLOCK, 2 THERMAL OVERLOAD RE- LAYS AND 2 HEATERS. COIL RATED 240 VOLTS 50 CYCLES, CONSISTS OF 3600 TURNS #32 WIRE, 253 OHMS DC RESISTANCE. CONTINUOUS DUTY. CONTACT RATINGS: 25 AMPS 600 VOLTS 10/19/44 DN-130 CAY-7609157G1 NOV. 44 REV. 8		CAY-29294 TDE RELAY KEYING: 3 PST SINGLE BREAK NORMALLY CLOSED CON- TACTS RATED 0.5 AMP., 2000 VOLTS. COIL RATED 115V DC, 0.061 AMPS, 13,200 TURNS OF #34 WIRE DC RESISTANCE, 850 OHMS MAX. 630 OHMS MIN., 30° RISE INTERMITTENT 30 MIN. 10/20/44 CAT:T-7604741 NOV. 44 REV. 45			CAY-29301 TBK-11 CONTACTOR: DPST DOUBLE BREAK NORMALLY OPEN. COIL RATED 115 VOLTS, 25 CYCLES. CONTACTS RATED 5 AMPS. AT 220 VOLTS AC, SAME AS -29063 EXCEPT FOR COIL RATING. USES SAME COIL AS -29098. DC RESISTANCE OF COIL 10/26/44 DS:S1264018A 9-A-3882 DEC. 44 LINE 3 REV 5			
AC & DC CONTINUOUS.		CAY-29290 CGE 29295 QJB SOLENOID, PULL TYPE: RATED 440V, 60 CPS, 4500 TURNS OF #32 GA E WIRE, WITH 230 OHMS DC RESISTANCE AND 1730 OHMS IMPEDANCE. SEALED CURRENT IS 0.3 AMPS. MAX. STROKE 3/4". PULL AT 350 MIN. VOLTAGE TO BE NOT LESS THAN 36 OZ. AT ANY PART OF PLUNGER STROKE. 10/24/44 CH:KS-5970 L-04 KS-5970-04 NOV. 44 CGE:G-36465 ISS. 2 APP. 1			CAY 29301 35 OHMS AVERAGE, 35.7 OHMS MAX. AND 33.3 OHMS MIN. AT 25°C.			
CAY-29291 TDE CONTACTOR: 4 PST, NORMALLY OPEN CONTACTOR INCLUDES SPDT INTERLOCK, 2 THERMAL OVERLOAD RE- LAYS & 2 HEATERS. COIL RATED 100 VOLTS, 60 CYCLES, CONSISTS OF 1250 TURNS, #28 WIRE 35.6 OHMS DC RESISTANCE CONTINUOUS DUTY. CONTACT RATINGS: 25 AMPS, 600 10/19/44 DN-130 CAY-7609157G4 NOV. 44 REV. 8		CRY-29296 JT RELAY ASSEMBLY: CONSISTS OF A NAVY TYPE -29297 RELAY EN- CLOSED IN A MODIFIED NAVY TYPE V-S 125 JUNCTION BOX. 10/24/44 NOV. 44			CAY-29302 TBK-9 CONTACTOR (TIME DELAY) SPST MAIN CONTACT WITH 2 INTERLOCKING SPST AUXILIARY CONTACTS, NORMALLY OPEN CONTACTS WILL CLOSE 500 AMPS DC MAX. AND CARRY 300 AMPS CONTINUOUSLY. TIME DELAY VARIABLE 0.5 TO 6 SECONDS. MAIN COIL RATING: 230 TO 250 VOLTS DC. INTER- 10/26/44 AT-2S/313390 CAY:24-J-933P7 MAR. 45 COIL-S/895671 REV C 17-H-9D			
VOLTS AC AND DC CONTINUOUS.		CSD-29297 JT RELAY: SPST N.O. CONTACTS RATED 250V DC 30 AMPS COIL RATED 120V DC. 10/24/44 8HX6 CAT. NOV. 44			CAY-29302 MITTENT, NEUTRALIZING COIL 32V DC CON- TINUOUS. MAIN COIL 9600 TURNS #32 CU WIRE; 980 OHMS DC RES. AT 25°C. NEUTRAL- IZING COIL 3000 TURNS #32 CU WIRE; 230 OHMS DC RES. AT 25°C.			
CAY-29292 TDE CONTACTOR: 4 PST NORMALLY OPEN CONTACTOR, INCLUDES SPDT INTERLOCK, 2 THERMAL OVERLOAD RE- LAYS, AND 2 HEATERS. COIL RATED 100 VOLTS, 60 CYCLES, CONSISTS OF 1250 TURNS #28 WIRE 35.6 OHMS DC RESISTANCE CON- TINUOUS DUTY. CONTACT RATINGS: 25 AMPS, 10/19/44 DN-130 CAY-7609157G3 NOV. 44 REV. 8		CRY-29298 QJB RELAY, PLUG IN: DPST CONTACTS RATED AT 115V AC, 3 AMPS; NON-INDUCTIVE. COIL RATED 120V AC, 60 CPS, APPROX 0.1 AMPS, 4000 TURNS #34 GA FORMEX COPPER WIRE, 214 OHMS DC. RESIS- TANCE. FITS OCTAL STYLE SOCKET. CH:KS-9530 ISS 1 10/24/44 A-8051 APP. 2 CN:ESL-657680 NOV. 44 CH:KS-9530 ISS. 4			CAY-29303 TBK-9 CONTACTOR (TIME DELAY) SPST MAIN CONTACT WITH 2 INTERLOCK SPST AUXILIARY CONTACTS NORMALLY CLOSED ONE INTERLOCK NORMALLY OPEN. CONTACT RATINGS WILL CLOSE 500 AMPS DC MAX. AND CARRY 300 AMPS CONTINUOUSLY. TIME DELAY VARI- ABLE 0.5 TO 6 SECS. COIL RATING MAIN 10/26/44 AT22S/1032962 CAY:24-J-933P8 MAR. 45 COIL S/895671 REV. 0 17-H-9D			
600 VOLTS AC AND DC CONTINUOUS. SAME AS -29291 EXCEPT FOR THERMAL OVERLOAD RE- LAYS AND HEATERS.		CRY-29299 QJB RELAY PLUG IN: TWO SETS OF CONTACT SPRINGS (1) SPDT CON- TACTS RATED AT 115V AC, 1 AMP NON- IN- DUCTIVE (2) DPST N.O. 115V AC; 4 AMPS, NON-INDUCTIVE. COIL RATED 120V DC. AP- *CH:KS-9531 ISS 1 APP 2. CN:ESL-657680 ISS. 4 10/24/44 B-8051 *SEE ABOVE NOV. 44 CH:KS-9531			CAY-29303 COIL 230 TO 250 VOLTS DC. INTERMITTENT 9600 TURNS #32 CU WIRE; 980 OHMS DC RES. AT 25°C. NEUTRALIZING COIL 32V DC. CON- TINUOUS 5000 TURNS #32 CU WIRE; 230 OHMS DC RES AT 25°C.			
CAY-29293 TDE CONTACTOR: 4 PST, NORMALLY OPEN CONTACTOR, INCLUDES SPDT INTERLOCK, 2 THERMAL OVERLOAD RE- LAYS AND 2 HEATERS. COIL RATED 600 VOLTS, 60 CYCLES. CONSISTS OF 7400 TURNS, #36 WIRE 1235 OHMS DC RESISTANCE. CONTACT RATINGS: 25 AMPS 600 VOLTS AC & DC 10/19/44 DN-130 CAY-7609157G2 NOV. 44 REV. 8		CRY-29299 PROX 0.024 AMPS, 25650 TURNS OF #40 GA E WIRE, 5000 OHMS DC RESISTANCE. FITS OCTAL STYLE SOCKET.			CAY-29304 TBK-9 CONTACTOR (TIME DELAY) SPST MAIN CONTACT, 2 INTERLOCK SPST CON- TACTS NORMALLY OPEN. CONTACT RATINGS WILL CLOSE 500 AMPS DC MAX. AND CARRY 300 AMPS CONTINUOUSLY. TIME DELAY VARI- ABLE 0.5 TO 6 SECS. COIL RATINGS MAIN COIL: 115-125V DC INTERMITTENT 4900 10/27/44 AT-2S/816890 CAY:24-J-932P7 MAR. 45 COILS/895672 REV 0			

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NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
		CAY-29304			CCX-29308			CAY-29314 TBK-11
		TURNS #29 CU WIRE; 257 OHMS DC RES. AT 25°C. NEUTRALIZING COIL: 16V DC. CONTINUOUS. 1500 TURNS #29 CU WIRE; 57.5 OHMS DC RES. AT 25° C.			0.65 TO 0.8 SECONDS OVERTRAVEL, AND 4 SECONDS MAXIMUM RESET. RELAY RESET BY SPRING TENSIONEL BY GEAR TRAIN.			CONTACTOR 3PST. ONE MAKE INTERLOCK NORMALLY OPEN CONTACT RATINGS: 25 AMPS AT 600V. OR 400V 60 CYCLES CONTINUOUS; 250 AMPS INTERMITTENT AT 600V AC OR 150 AMPS AT 440V. 60 CYCLES. COIL DATA: 110V. 25 CYCLES. @COIL S#1224451 10/31/44 HDN-130 32-J-682 JULY 45 S#11902730 REV 7
		CAY-29305 TBK-9			CAY-29309 TBK-11			CAY-29314
		CONTACTOR (TIME DELAY) SPST MAIN CONTACT, 2 INTERLOCK SPST CONTACTS, NORMALLY CLOSED, ONE INTERLOCK CONTACT NORMALLY OPEN. CONTACT RATINGS WILL CLOSE 500 AMPS DC MAX. AND CARRY 300 AMPS CONTINUOUSLY. TIME DELAY VARIABLE 0.5 TO 6 SECS. COIL DATA - MAIN 10/27/44 AT-22S#1032962 CAY:24-J-932P8 MAR. 45 COIL:S#895672 REV 0			RELAY, OVERLOAD SPST, NORMALLY CLOSED. MANUAL RESET. RESET TIME LESS THAN 30 SEC. ADJUSTMENT RANGE ±15%. CONTACT RATINGS 5 AMPS. 440V. AC. & 1 AMP 440V. AC. COIL DATA: 42 TURNS #11 WIRE, RATED 8.32 AMPS. 10/31/44 MG-S1186641 32-J-15 NOV. 44 COIL:S#1190157 REV 9			2750 TURNS #31 EN. CU WIRE. 145 OHMS DC RES.
		CAY-29305			CAY-29310 TBK-20			CAY-29315
		COIL 115 TO 125V DC INTERMITTENT 4900 TURNS #29 CU WIRE; 257 OHMS DC RES. AT 25°C. NEUTRALIZING COIL: 16V DC CONTINUOUS 1500 TURNS #29 CU WIRE; 57.5 OHMS DC RES. AT 25°C.			RELAY SPST, NORMALLY CLOSED (MAIN CONTACT) WITH TWO INTERLOCKS, ONE NORMALLY OPEN, ONE NORMALLY CLOSED. CONTACT RATINGS: WILL CLOSE 400 AMPS. WILL CARRY 150 AMPS AT 250V DC CONTINUOUSLY. COIL DATA TWO WINDINGS: ONE 4000 TURNS #31 EN CU 10/31/44 1A0-4111 37-J-890,P5 DEC. 44 COIL:S#1315390 REV 6			CONTACTOR (COIL) 3PST, NORMALLY OPEN, INTERLOCK. CONTACT RATING: 25 AMPS CONTINUOUS AT 600V AND 440V, 60 CPS; 250 AMPS AT 600V, 60 CPS AND 150 AMPS AT 440V, 60 CPS, INTERRUPTING. COIL DATA: 1375 TURNS #29 EN. CU. WIRE. 110 VOLTS 60 CYCLES. RESISTANCE 11/6/44 HDN-130 COIL: 32J-682 MAR. 45 S#1223950 S#1190273 REV 7
		CAY-29306 TBK-13			CAY-29310			CAY-29315
		RELAY, OVERLOAD SPST, NORMALLY CLOSED. MANUAL RESET. COIL RATED: 230V, 28.5 AMPS, 80 TURNS OF .102" SQ. D.C.C. COPPER WIRE. KDS 1467 CALIBRATED AT 26.4 AMPS. CONTACT RATINGS: 5 AMPS CONT. AT 250V DC 1 AMP. INT. AT 250V DC OIL DASHPOT USED TO PRE- 10/27/44 KN5P CAY:33-J-408P16 FEB. 45 S#1115387 REV 23			WIRE 245 OHMS DC RES. 115V DC INTERMITTENT OTHER, 2052 TURNS. #33 EN. CU WIRE, 250 OHMS DC RES., 115V DC INTERMITTENT, DEFINITE TIME ACCELERATION. CAY-29310 10/31/44 MI HEATER: 36H#-639. P22 DEC. 44 S#1265734 REV 5			35 OHMS DC.
		CAT-29306			CAY-29311 TBK-20 17-R-6			CAY-29316 TBK-9
		VENT OPERATION DUE TO SHOCK. DC RESISTANCE OF COIL AT 25°C IS 0.03 OHMS. MEMCO ENG HANDBOOK PAGE 2114.120. 5/1/41			RELAY OVERLOAD SPST, NORMALLY OPEN, ADJUSTABLE FROM 90-110%. MANUAL RESET. HEATER: S#1265734; 53 AMPS. CONTACT RATINGS 5 AMPS AC. 1 AMP DC. 10/31/44 MI HEATER: 36H#-639. P22 DEC. 44 S#1265734 REV 5			CONTACTOR 3PST ONE MAKE INTERLOCK. CONTACT RATINGS 25 AMPS CONTINUOUS, 300 AMPS INTERMITTENT AT 440V AC. COIL:S#968339, 120V, 60 CYCLES, 1500 TURNS #28 WIRE 30Ω DC RES., CONTINUOUS DUTY. 11/6/44 DN-150-N S#973644 74-A-790 DEC. 44 COIL:S#968339 REV 10
		CAY-29307 TBK-13			CAY-29312 TBK-20 17-R-6			CAY-29317 TBK-9
		RELAY, OVERLOAD SPST, NORMALLY CLOSED. COIL RATED: 115V, 58 AMPS, 39 TURNS OF 144" SQ. D.C.C. COPPER WIRE, CALIBRATED AT 53 AMPS. CONTACT RATINGS: 5 AMPS AT 250V DC. 1 AMP INTERMITTENT AT 250V DC. MANUAL RESET. OIL DASHPOT USED TO PREVENT OPERATION 10/27/44 KN5P CAY:33-J-406P16 FEB. 45 S#1115387 REV 19			RELAY, OVERLOAD SPST, NORMALLY CLOSED. MANUAL RESET. ADJUSTABLE FROM 90 TO 110%. CONTACT RATING: 5 AMPS AC. 1 AMP DC. HEATER RATED 26.0 AMPS. S#1265727. 10/31/44 MI 36-J-639, P22 DEC. 44 COIL:S#1265727 REV 5			RELAY, OVERLOAD SPST, NORMALLY CLOSED. CONTACT RATINGS: 5 AMPS AT 600V CONTINUOUS, 0.5 AMP. AT 230V DC INTERRUPTED, 1.2 AMPS AT 115V DC INTERRUPTED & 6.0 AMPS AC UP TO 600V. NORMAL SETTING 8.4 AMPS. TWO HEATERS RATED 8.4 AMPS EACH. MANUAL RESET. OIL 11/6/44 S#860064 "TAN" 58-A-763 DEC. 44 COIL:S#551940 REV 10
		CAY-29307			CAY-29313 TBK-20			CAY-29317
		DUE TO SHOCK. MEMCO ENG HANDBOOK PAGE 2114.120 5/1/41.			RELAY SPST, NORMALLY CLOSED (MAIN CONTACT), WITH TWO INTERLOCKS, ONE NORMALLY OPEN, ONE NORMALLY CLOSED. CONTACT RATINGS: WILL CLOSE 100 AMPS, AND WILL CARRY 150 AMPS AT 250V CONTINUOUSLY. COIL: S#1315391, TWO WINDINGS: ONE, 8000 TURNS 10/31/44 1A0-4111 37-J-890 P5 DEC. 44 COIL:S#1315391 REV 6			DASH POT TO PREVENT OPERATION DUE TO SHOCK. ADJUSTMENT RANGE 80X-120X OF SETTING.
		CCX-29308 QJB			CAY-29313			CAY-29318 TBK-9
		TIME DELAY RELAY: CONSISTS OF AC MOTOR RATED 103 TO 106 VOLTS, 60 CPS, 0.06 AMPS, CONNECTED THROUGH GEAR TRAIN TO OPERATE SPDT MICRO-SWITCH, MOUNTED ON METAL BASE AND PROVIDED WITH REMOVABLE COVER. TUNING INTERVAL 60 TO 72 SIGNALS OPERATION WITH 10/28/44 44S39 CM:KS-5839 ISS 4 NOV. 44 FIGURE 1			#34 IN. CU WIRE, 980 OHMS RES. 230V DC INTERMITTENT, OTHER, 2100 TURNS #38 EN. CU WIRE, 500 OHMS RES. 230V DC INTERMITTENT. CAY-29313 10/31/44 MI HEATER: 36H#-639. P22 DEC. 44 S#1265734 REV 5			RELAY, OVERLOAD SPST, NORMALLY CLOSED. CONTACT RATINGS: 5 AMPS AT 600V CONTINUOUS; 0.5 AMP AT 230V DC INTERRUPTED, 1.2 AMPS AT 115V DC INTERRUPTED; 6.0 AMPS AC UP TO 600V. NORMAL SETTING 32 AMPS TWO HEATERS RATED AT 32 AMPS. EACH. MANUAL RESET. OIL DASH 11/6/44 S-860064 "TAN" 58-A-763 DEC. 44 COIL:S#501695 REV 10

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CAY-29318
 POT TO PREVENT OPERATION DUE TO SHOCK. ADJUSTMENT RANGE ± 20% OF NORMAL SETTING.

CAY-29323 TBL-2
 CONTACTOR;
 SPST, WITH TWO AUXILIARY SINGLE POLES NORMALLY OPEN. CONTACT RATING - CONTACT WILL CLOSE 500 AMPS DC MAX. AND CARRY 300 AMPS CONTINUOUSLY. TIME RELAY VAR-
 *CAY ENG HANDBK PAGE 1175.0001 DATE 5-1-41
 11/7/44 AT-145#845831 *SEE ABOVE
 DEC. 44 COIL:S#895672

CSD-29327
 RESISTOR MUST BE USED IN SERIES WITH THAT CASE. WHEN OPERATING AT 115 VOLTS A 300 OHM RESISTOR IS USED. THE RESISTORS ARE NOT INCLUDED IN THE NAVY TYPE DESIGNATIONS.

CAY-29319 TBK-9
 RELAY, OVERLOAD
 SPST, NORMALLY CLOSED. CONTACT RATINGS: 5 AMPS AT 600V CONTINUOUS; 0.5 AMP AT 230V DC INTERRUPTED; 1.2 AMPS AT 115V DC INTERRUPTED; 6.0 AMPS AC UP TO 600V. NORMAL SETTING 17 AMPS. TWO HEATERS RATED AT 17 AMPS EACH. MANUAL RESET. OIL
 11/6/44. S-860064 "TAN" 58-A-763
 DEC. 44 COIL:S#474422 REV 10

CAY-29323
 TABLE 0.5 TO 6. SECONDS. COIL DATA:
 MAIN COIL - 115 TO 125V DC INTERMITTENT, 4900 TURNS #29 WIRE, 257 OHMS RES. NEUTRALIZING COIL - 16V DC. CONTINUOUS. 1500 TURNS #29 WIRE 57.6 OHMS RES. SIMILAR TO -29322 EXCEPT COIL.

CSD-29328 TBL-3
 CONTACTOR;
 DPST, 1 BREAK PER CIRCUIT, NORMALLY OPEN WITH BLOW-OUT COIL. CONTACTS RATED 1 AMP, 230V DC. COIL DATA - 115V AC, 60 CYCLES. 0.75-2.0 AMPS, 4200 TURNS #32 WIRE. RESISTANCE 180 OHMS ±7.5%. RESET COIL OPERATES ON 115V DC, 620 OHMS.
 11/9/44 CXA-1970 CAY:T-7609921
 DEC. 44 P 4 REV 1

CAY-29319
 DASH POT TO PREVENT OPERATION DUE TO SHOCK. ADJUSTMENT RANGE 80%-120% OF SETTING.

CAY-29324 TBK-9
 CONTACTOR;
 DPST WITH ONE NORMALLY OPEN INTERLOCK AND ONE NORMALLY CLOSED INTERLOCK WITH BLOWOUT. CONTACT RATINGS. 50 AMPS AT 600 VOLTS (8 HOUR) 60 AMPS AT 600 VOLTS (1 HOUR) WITH 200 AMPS INTERRUPTING CURRENT. COIL DATA: 150 VOLTS DC 13000 TURNS #32
 11/7/44 22-C-2A,S #598217 CAY:1-A-698
 FEB. 45 COIL S#285641

CSD-29329 TBL-7
 RELAY;
 3 PST, NORMALLY OPEN. CONTACTS RATED 5 AMPS AT 230V DC. COIL DATA - 85V DC + 45%-23%; 10500 TURNS #35 WIRE. RESISTANCE 1000 OHMS ±7.5%. OPERATES IN SERIES WITH A 2500 OHM RESISTOR NOT INCLUDED IN THIS NAVY TYPE DESIGNATION. SAME AS 29331
 11/9/44 CXA-2996 CAY:T-7609921
 DEC. 44 P 8 REV 1

CAY-29320 TBK-9
 RELAY, OVERLOAD;
 SPST, NORMALLY CLOSED. MANUAL RESET. CONTACT RATINGS: 5 AMPS, 600V CONTINUOUS; 0.5 AMPS 230V DC INTERRUPTED; 1.2 AMPS 115V DC INTERRUPTED. OIL DASH POT TO PREVENT OPERATION DUE TO SHOCK. NORMAL SETTING 58 AMPS ± 20%. TWO HEATERS RATED
 11/6/44 S-#860065 "TAN" 58-A-763
 DEC. 44 COIL:S#474432

CAY-29324
 UNENAMEL WIRE, 1000 OHMS DC RES.

CSD-29329
 EXCEPT FOR AUXILIARY ARM AND BAR IN THE MOVING CONTACT.

CAY-29320
 AT 58 AMPS EACH. ADJUSTMENT RANGE ± 20% OF NORMAL SETTING.

CSD-29325 TBL-3
 RELAY;
 DPDT, TWO MAKE AND TWO BREAK CIRCUIT. CONTACTS RATED 2 AMPS AT 220V DC, 10 AMPS AT 10V AC. COIL RATED 220V DC ±20%. 15000 TURNS WIRE SIZE #39. RESISTANCE - 3200 OHMS WITHIN 7 1/2%. OPERATED IN SERIES WITH A 3000 OHM RESISTOR NOT INCLUDED IN THIS NAVY TYPE DESIGNATION.
 11/8/44 CX-2122 CAY:T-7609921 P 6
 DEC. 44 REV 1

CSD-29330 TBL-7
 RELAY;
 3 PST, 1 BREAK PER CIRCUIT, NORMALLY OPEN. CONTACTS RATED 5 AMPS AT 110V AC. COIL DATA - 60V AC OR 110V AC. ±10% 3000 TURNS #29 WIRE. RESISTANCE 75 OHMS ±7.5%. OPERATES IN SERIES WITH A 175 OHM RESISTOR NOT INCLUDED IN THIS NAVY TYPE DESIGNATION.
 11/9/44 CXA-2997 CAY:T-7609921
 DEC. 44 P 9 REV 1

CSD-29321 TBL-2
 RELAY;
 DPST, NORMALLY OPEN. NO BLOW OUT COILS. CONTACT RATINGS 1 AMP AT 230 VOLTS DC. COIL DATA: 115V OR 230V DC; -23%+45% VOLTAGE. 4200 TURNS #32 WIRE. RESISTANCE WITHIN 7 1/2%-180 OHMS.

CSD-29325
 INCLUDED IN THIS NAVY TYPE DESIGNATION.

CSD-29330
 DESIGNATION. SIMILAR TO -29332 EXCEPT FOR AUXILIARY ARM AND BAR IN MOVING CONTACT.

11/6/44 CX-1969 CAY:T-7606138
 DEC. 44 PT 6-7, REV 9

CAY-29322 TBL-2
 CONTACTOR, ACCELERATING;
 SPST, WITH TWO AUXILIARY SINGLE POLES NORMALLY OPEN. CONTACT RATING - WILL CLOSE 500 AMPS DC MAX. AND CARRY 300 AMPS CONTINUOUSLY. TIME DELAY VARIABLE 0.5 TO 6.0 SECONDS. COIL DATA:
 *CAY ENG HANDBK PAGE 1175.0001 5-1-41
 11/17/44 AT-145#845831 *SEE ABOVE
 DEC. 44 COIL-S#895671

CSD-29326 TBK-11
 RELAY;
 SPST, ONE BREAK PER CIRCUIT, NORMALLY CLOSED. CONTACTS RATED 5 AMPS, 110V AC. COIL DATA: 3300 TURNS #31 WIRE, RESISTANCE 105 OHMS ±7.5%. COIL OPERATES AT 11V AC ± 10%, 60 CYCLES. HAS MAGNETIC BLOWOUT.
 11/8/44 CX-2120 COIL CAY:T-7609921,P5
 DEC. 44 TYPE "AB" REV 1

CSD-29331 TBL-5
 RELAY;
 3 PST, NORMALLY OPEN. CONTACTS RATED 5 AMPS AT 230V DC. COIL DATA: 85V DC + 45%-23%. 10500 TURNS #35 WIRE. RESISTANCE 1000 OHMS ±7.5%. OPERATES IN SERIES WITH A 2500 OHM RESISTOR NOT INCLUDED IN THIS NAVY TYPE DESIGNATION.
 11/9/44 CX-2996 CAY:T-7606138
 DEC. 44 P 15 REV 9

CAY-29322
 MAIN COIL 230-250V DC INTERMITTENT 9600 TURNS #32 WIRE 930Ω 25°C. NEUTRALIZING COIL - 32V DC CONT. 3000 TURNS #32 WIRE 230Ω, 25°C.

CSD-29327 TBL-2
 RELAY;
 DPST, 2 MAKE CONTACTS WITH BLOW-OUT COIL, NORMALLY OPEN. CONTACTS RATED 1 AMP, 230V DC. COIL TO OPERATE AT 115 OR 230V DC, +45%-23%. 15000 TURNS #39 WIRE. RESISTANCE - 3200 OHMS ±7 1/2%. WHEN OPERATING ON 230 VOLTS A 3000 OHMS RESISTOR NOT INCLUDED IN THIS NAVY TYPE DESIGNATION.
 11/8/44 CX-1970 CAY:T-7609921,PT2&3
 DEC. 44 REV. 1

CSD-29332 TBL-6
 RELAY;
 3 PST, ONE BREAK PER CIRCUIT, NORMALLY OPEN. CONTACTS RATED 5 AMPS AT 110V AC. COIL DATA: 60V AC OR 110V AC ±10%. 3000 TURNS #29 WIRE. RESISTANCE 75 OHMS ±7.5%. OPERATES IN SERIES WITH A 75 OHMS RESISTOR NOT INCLUDED IN THIS NAVY TYPE DESIGNATION.
 11/9/44 CX-2997 CAY:T-7606138
 DEC. 44 P 16 REV 9

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED
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CG- 29349	XTDZ & TDZ	17-R-6								
RELAY SERVICE A CONSISTS OF 4 SPST, NORMALLY OPEN CONTACTS, AND 2 SPDT, NORMALLY CLOSED. SPST RATINGS 6.5 AMP, 440 VOLTS AC. CLOSERS 8 AMP AT 230V DC INTERRUPT 1.5 AMP AT 115V DC AND 0.5 AMP AT 230V DC. COIL RATED 115/230V DC, OR 110V AC, 50/60 CYCLES. 11/27/44 CR-5182-5A3 CG:P-7767220, DEC. 44 PT 1, REV 10			CAY-29353 WIRE WITH 55 OHMS DC RES. WINDING #2 HAS 13,350 TURNS #33 EN COPPER WIRE WITH 121U OHMS DC RES. RESET TIME 45 SECONDS. RESET CONTACT RATINGS 15 AMPS AT 250 VOLTS.			6.7 AMPS. CAY-29358 MANUAL RESET ADJUSTMENT RANGE ± 20% NORMAL SETTING. OIL DASHPOT. PART OF CAY-21425.				
CG- 29349 REQUIRES RESISTORS FOR OPERATION.			CAY- 29354 TBK-20 CONTACTOR: MAIN CONTACT DPST NORMALLY OPEN; WITH 3 INTERLOCKS, ONE NORMALLY OPEN AND 2 NORMALLY CLOSED. CONTACT RATINGS: 50 AMPS AT 250V DC. COIL DATA: RATED 230 VOLTS. A WINDING #1 HAS 3520 TURNS. #30 EN COPPER WIRE WITH 220 OHMS DC RES. WINDING 11/28/44 IM-220 CAY: 37-J-922 DEC. 44 COILS#1303532 REV 9			CAY- 29359 TBL-15 RELAY, OVERLOAD SPST NORMALLY CLOSED. CONTACT RATINGS: 5 AMPS - 440 VOLTS AC AND 1 AMP - 230 VOLTS DC. HEATER (S#1265715) RATED AT 6.35 AMPS. MANUAL RESET 90 TO 110% ADJUSTMENT RANGE. PART OF CAY -211228. 12/4/44 "MI" HEATER: CAY:36-J-639 FEB. 45 S#1265715 REV. 7				
CG-29350 XTDZ & TDZ 17-R-6 RELAY SERVICE A CONSISTS OF 4 SPST, NORMALLY OPEN CONTACTS, AND 2 SPDT, NORMALLY CLOSED. FIRST 2 SPST TO CLOSE ARE RATED 0.25 AMP 115V AC, OR 0.25 AMP 115V DC; OTHER TWO SPST RATED 6.5 AMP, 440 VOLTS AC, OR WILL CLOSE AT 8 AMPS, 230V DC, INTER-11/27/44 CR-5182-5B2 CG:P-7767220, DEC. 44 PT 2, REV 10			CAY- 29354 #2 HAS 26,700 TURNS #36 EN COPPER WIRE WITH 4850 OHMS DC RES. RESET TIME 45 SECONDS. RESET CONTACT RATINGS 50 AMPS AT 250 VOLTS.			CAY- 29360 TBL-15 CONTACTOR DPST - NORMALLY OPEN, WITH TWO INTERLOCKS ONE NORMALLY OPEN AND ONE NORMALLY CLOSED. CONTACTS RATED 25 AMPS AT 600 VOLTS. COIL DATA: 88 TO 167 VOLTS DC; 4400 TURNS WIRE SIZE #27 EN. CU. DC RESISTANCE 92 OHMS. 12/4/44 IM-120 CAY:45J-108 P1 JAN. 45 REV 6				
CG-29350 RUPT 1.5 AMP AT 115V DC, OR 0.5 AMP AT 230V DC COIL RATED 115V DC.			CCQ- 29355 AN/APA-17A RELAY 3 PST, NORMALLY OPEN. CONTACTS RATED 5 AMPS 115V AC MINIMUM. COIL DATA: 250 OHMS DC RESISTANCE (±10%); RELAY PULLS IN AT 16-18V, AND DROPS OUT AT 8.5V OR LESS. 11/29/44 BOY-7034 CKB:36-A00A027-1 MAR. 45 REV B			CAY-29361 TBL-13 RELAY, OVERLOAD SPST NORMALLY CLOSED. CONTACT RATINGS: 5 AMPS - 440V AC, 1 AMP - 230V DC. HEATER (S#1255725) RATED AT 20.5 AMPS. MANUAL RESET ADJUSTMENT RANGE 90 TO 110%. 12/4/44 "MI" CAY:36-J-639 JAN. 45 REV 7				
CG-29351 XTDZ & TDZ 17-R-6 RELAY SERVICE A SPST, NORMALLY CLOSED, RATED 0.25 AMP, 115V DC; OR 5 AMPS, AT 115V AC. COIL RATING: TRIPPING CURRENT 0.80 AMP, COIL RES. 5.7 OHMS, CONT. CURRENT 0.64 AMP. RESET RATING: 110V 50/60 CYCLES. COIL RES. 42 OHMS. 11/27/44 CR-5282-2A5C CG:P-7767078, DEC. 44 PT 2 REV 4			CCQ- 29356 AN/APA-17A RELAY: DPDT, CONTACT RATINGS 1 AMP MINIMUM. COIL DATA: 250 OHMS ±10% DC RESISTANCE; RELAY TO PULL-IN AT 16-18 VOLTS INPUT, AND DROP OUT AT 8.5 VOLTS OR LESS. 11/29/44 BOY-6D34 CKB:36-A00A033-2 DEC. 44 REV. B			CAY-29362 TBL-13 RELAY SPST NORMALLY CLOSED (MAIN CONTACT); SPST INTERLOCKS ONE NORMALLY OPEN AND ONE NORMALLY CLOSED. CONTACTS RATED: 150 AMPS AT 250V DC, WILL CLOSE 400 AMPS. COIL DATA: 115 VOLTS, 4200 TURNS #30 EN. CU. WIRE. DC RESISTANCE - 261 OHMS. 12/5/44 1A0244111 CAY:45-J-108 P5 JAN. 45 COIL:S#1315392 REV 6				
CHP- 29352 XTDZ & TDZ RELAY, TIME DELAY: OPERATING VOLTAGE 110V, 50/60 CYCLES. SWITCH #1: ONE SET NORMALLY OPEN CONTACTS, 110V AC, 10 AMPS. SWITCH #2: ONE SET NORMALLY OPEN CONTACTS, 110V AC, 10 AMPS; 115/230V DC, 0.1 AMP. TIME DELAY: SWITCH #1 CLOSSES 60 SEC. ±2 SEC; 11/27/44 5900 SERIES CG:P-7766674 MAR. 45 PT 2 REV 7			CAY- 29357 TBL-2 RELAY, OVERLOAD: SPST NORMALLY CLOSED. CONTACT RATINGS: 0.5 AMPS AT 230V DC INTERRUPTED 1.2 AMPS AT 115V DC INTERRUPTED, 5 AMPS AT 600V CONT. 6 AMPS AC TO 600 VOLTS. HEATER (S #474429) RATED AT 34 AMPS. MANUAL S#860064 "TAN" HEATER:S#474429 12/2/44 *SEE ABOVE CAY:50A-763 DEC. 44			CAY-29363 TBL-3 CONTACTOR 3PST, ONE MAKE INTERLOCK. CONTACT RATINGS: 25 AMPS AT 440V AC, CONTINUOUS; 300 AMPS AT 440V AC INTERRUPTING CAPACITY COIL DATA: 440V, 60 CYCLES, 6000 TURNS #35 WIRE. DC RESISTANCE 820 OHMS. 12/20/44 DN-130N #973644 CAY:74-A-790 JAN. 45 COIL:S#944720 REV 10				
CAJN- 29352 SWITCH #2 CLOSSES 1/2 SEC. AFTER SWITCH #1.			CAY- 29357 RESET. ADJUSTMENT RANGE + 120 %,-90% OF A NORMAL SETTING. OIL DASHPOT. PART OF 21234A.			CAY- 29364 TBL-6 RELAY, OVERLOAD SPST NORMALLY CLOSED. MANUAL RESET. ADJUSTMENT RANGE -85 TO 115% OF RATING. RESETTING TIME 20 SECONDS. CONTACT RATED: 5 AMPS CONT, 1 AMP INTERRUPTED. WORKING VOLTAGE 440V AC. COIL DATA: 12.5 AMPS. 28 TURNS .081 X .129 WIRE. 12/5/44 HG S#1186641 CAY:32-J-15 JAN. 45 COIL:S#1190161 REV 9				
CAY- 29353 TBK-20 CONTACTOR: MAIN CONTACT DPST NORMALLY OPEN; WITH 3 INTERLOCKS, ONE NORMALLY OPEN AND 2 NORMALLY CLOSED. CONTACT RATINGS: 50 AMPS AT 250V DC. COIL DATA: RATED 115 VOLTS. WINDING #1 HAS 1760 TURNS #30 EN COPPER *CAY:37-J-922, REV 9 45-J-406 P1, REV 4 11/23/44 IM-220 *SEE ABOVE DEC. 44 COIL S#1303531			CAY- 29358 TBL-5 RELAY, THERMAL OVERLOAD SPST NORMALLY CLOSED. CONTACT RATINGS: 1/2 AMP AT 230VDC INTERRUPTED, 1.2 AMPS AT 115V DC INTERRUPTED, 5 AMPS AT 600V DC CONTINUOUS. C AMPS AT 600 VOLTS AC CONTINUOUS HEATER (#551938) RATED AT 3 HEATER:S#551938 12/4/44 S#860064 CAY:58-A-763 FEB. 45 TAN 8			CAY- 29365 TBL-6 RELAY SPST NORMALLY CLOSED. NORMAL RESET. ADJUSTMENT RANGE ± 10% - TIME 20 SECONDS. CONTACTS RATED: 5 AMPS AT WORKING VOLTAGE 1 AMP AT 440V AC. COIL DATA: #1190155) RATED AT 6.72 AMPS. 52 TURNS WIRE SIZE #13. 12/5/44 HG #1186641 CAY:32-J-15 JAN. 45 REV 9				
DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
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CAY-29366 TBL-13
RELAY, OVERLOAD
SPST NORMALLY CLOSED. MANUAL RESET ADJUSTMENT RANGE 90 TO 110% - RESETTNG TIME 45 SECONDS OR LESS. CONTACT RATINGS: 5 AMPS AT 440V AC 1 AHP AT 230V DC HEATER RATING 41 AMPS.

12/5/44 "MI" CAY:36-J-639
JAN. 45 REV 7

CAY-29367 TBL-13
CONTACTOR
DPST NORMALLY OPEN WITH TWO INTERLOCKS ONE NORMALLY OPEN AND ONE NORMALLY CLOSED. CONTACTS RATED 25 AMPS, 250 VOLTS. COIL DATA: 145 TO 345 VOLTS, 8815 TURNS #30 EN. CU WIRE SIZE RESISTANCE 370 OHMS (S#1320627)
12/5/44 "MI"-120 CAY:37-J-922
JAN. 45 REV 9

CAY-29368 TBK-16
CONTACTOR
3 PST. ONE MAKE INTERLOCK. CONTACT RATINGS 25 AMPS AT 600V AC, 25 AMPS AT 440V 60- CONTINUOUS. 250 AMPS AT 600V AC, 150 AMPS AT 440V, 60- INTERMITTENT. COIL DATA: S#1264359 115V, 50/60- ± 10% .025 AMPS 1300 TURNS. WIRE SIZE #30 RES. 53Ω.
12/6/44 HDN-130 S#1190273 32-J-682
JAN. 45 COIL #1264359 REV 7

CAY-29369 TBL-13
RELAY, TIMING
SPST, NORMALLY CLOSED (MAIN CONTACT). TWO SPST INTERLOCKS, ONE NORMALLY OPEN AND ONE NORMALLY CLOSED. CONTACTS RATED: 150 AMPS AT 250V DC, WILL CLOSE 400 AMPS. COIL DATA: 230 VOLTS, 8400 TURNS #33 EN. CU. WIRE. 1045 OHMS DC RESISTANCE.
12/5/44 1A02 #4111 CAY:37-J-890
JAN. 45 COIL:S#1315393 REV 6

CAY-29370 TBL-6
CONTACTOR
WITH L-7 INTERLOCK. DPDT, ONE MAKE INTER LOCK AND ONE BREAK INTERLOCK, WITH BLOW-OUT COIL. CONTACTS RATED: 50 AMPS, CONT. 600V (8 HR.), 200 AMPS INTERMITTENT ARC RUPTURING. COIL DATA: 150V 1300 TURNS #32 UN. EN. WIRE, 1000 OHMS DC RES.
12/6/44 22-C-2A CAY:1-A-698
JAN. 45

CAY-29371 TBK-11
OVERLOAD RELAY
MANUAL RESET, SPST, NORMALLY CLOSED; COIL RATED 16.7 AMPS 21 TURNS .064 X .182 WIRE. ADJUSTMENT RANGE ± 15%. CONTACTS RATED 5 AMPS AT WORKING VOLTAGE, 1 AMP AT 440V AC. NO OIL DASHPOT. RESET TIME LESS THAN 30 SECONDS. PART OF CAY-
12/7/44 MG #1186641 32-J-15
JAN. 45 COIL #1190164 REV 9

21610. CW-29371

CAY-29372 TBL-10
RELAY, THERMAL OVERLOAD
SPST, NORMALLY CLOSED DOUBLE BREAK. CONTACTS RATED: 1 AMP AT 600 VOLTS DC. HEATER RATED 1.0 AMP. MANUAL RESET.

12/22/44 MW S#899866 CAY:65-D-24
FEB. 45 HEATER:S#966468 REV 3

CEE-29373 NJ 3, 7, 9
RELAY THERMAL TIME
NORMALLY OPEN; CONTACTS RATED 4 AMPS, 115V, 60-; 1500Ω; 30 SECOND DELAY; INTERMITTENT OPERATION; HEATER SEALED IN GLASS WITH MEDIUM 4-PRONG UX BASE. TUNGSTEN CONTACTS.

12/27/44 B-1504 CBM:746-150 T
MAY 45 ALT 0

CATH-29374 NJ 7, 9
RELAY
DPDT, CONTACTS RATED 15 AMPS AT 6V TO 5 AMPS AT 115 V AC, NON-INDUCTIVE LOAD; 5000 TURNS #35 E WIRE; 425Ω ± 10% MAX. DC RES; MAX. RATING ARMATURE OPEN 84 MA; MIN RATING ARMATURE CLOSED 65 MA; SIL-
*CBM:746-305 ALT 3
12/27/44 746-456 CBM:777-117
MAY 45 SA 1000XR88 ALT 3 *

CBM-29374
BER PLATED CONTACTS.

CSD-29375 NJ-3,4,7,9
RELAY
2 DPST NORMALLY OPEN. CONTACTS RATED: 30 AMPS 110V AC, 4 AMPS 115V DC INT. 30 AMPS 230V AC, 2 AMPS 230V DC *CBM:746-119 T ALT 0 (FOR DIMENSIONS ONLY). CBM:746-328, 746-390, OLD CSD TYPE ADBT8
12/27/44 8BX X *SEE ABOVE
MAY 45 COIL:"X"

CSD-29375
INT. COILS RATED 75V DC, 12,000 TURNS #37 WIRE, 1600Ω DC RESISTANCE.

CLR-29376 SV
RELAY
3 PST, ONE SET OF CONTACTS NORMALLY CLOSED. RATED 1/2 AMP AT 250V DC. TWO SETS OF CONTACTS NORMALLY OPENED. EACH RATED 30 AMPS AT 110V AC, 20 AMPS 220V AC. COIL HAS RESISTANCE 5000Ω RATED VOLTAGE OF 250V DC. EXTERNAL RESISTANCE
12/28/44 6104-244 CM:BA-10012-5
JAN. 45 REV 6

12,000Ω. SILVER PLATED CONTACTS. CLR-29376

CSD-29377 UJ
RELAY
DPST, CONTACTS RATED 6 AMPS, 120V AC, OR 24V DC NON-INDUCTIVE. COIL RATED 930 OHMS DC RESISTANCE, OPERATES AT 6.5 MA, AND 5.5V DC.

12/28/44 29XAX CDU:DD-5065-A
FEB. 45

CSI-29378 UJ
RELAY
SPOT, CONTACTS RATED 150 WATTS AT 110V AC NON-INDUCTIVE. COIL DATA: 5000 OHMS DC RESISTANCE.

12/29/44 4AH CDU:DD-3265-A-1
FEB. 45

CAY-29379 TCE
CONTACTOR
DPST, ONE NORMALLY OPEN INTERLOCK, ONE NORMALLY CLOSED INTERLOCK. CONTACT RATINGS: 50 AMPS, CONT. AT 115V DC, 50 AMPS AT 600 VOLTS 8 HRS., 60 AMPS AT 600 VOLTS 1 HR., 200 AMPS INTERMITTENT. COIL DATA: 6500 TURNS #29 UN. EN. WIRE, 75 VOLTS.
12/29/44 22-C-2S S#598217 CAY:1-A-698
JAN. 45 COIL:S#285640

CAY-29379
250 OHMS DC RESISTANCE AT 25°C.

CAY-29380 TCE
CONTACTOR
DPST, ONE NORMALLY OPEN INTERLOCK, ONE NORMALLY CLOSED INTERLOCK. CONTACT RATINGS: 50 AMPS AT 600 VOLTS 8 HRS., 60 AMPS AT 600 VOLTS 1 HR., 200 AMPS INTERMITTENT. COIL DATA: 1170 TURNS #21 D.C.C. WIRE, 15V, 7.50 OHMS DC RES. AT 25°C.
12/29/44 22-C-2A S#598217 CAY:1-A-698
JAN. 45 COIL:S#668974

CAY-29381 TCE
CONTACTOR
DPST, ONE NORMALLY OPEN INTERLOCK, ONE NORMALLY CLOSED INTERLOCK. CONTACT RATINGS: 50 AMPS AT 600 VOLTS 8 HRS., 60 AMPS AT 600 VOLTS 1 HR., 200 AMPS INTERMITTENT. COIL DATA: 2200 TURNS #24 UN. EN. WIRE, 25 VOLTS, 1.20 AMPS, 27 OHMS
12/29/44 22-C-2A S#598217 CAY:1-A-698
JAN. 45 COIL:S#668973

CAY-29381
DC RESISTANCE AT 25°C.

CAY-29382 TCE
CONTACTOR
SPST, TWO INTERLOCK CONTACTS NORMALLY OPEN. CONTACT RATING: CONTACT WILL CLOSE AT 500 AMPS DC AND CARRY 300 AMPS CONTINUOUSLY. TIME DELAY VARIABLE FROM 0.5 SECONDS TO 6 SECONDS. COIL DATA: 1620 TURNS #24 EN. WIR, 24 VOLTS, 29.3 OHMS
12/29/44 22-C-2A S#845831 CAY:ENG. HD BK
JAN. 45 COIL:S#1135674 PAGE 1175.0001

CAY-29382
DC RES., NEUTRALIZING COIL: 620 TURNS #25 EN. WIRE, 6.4V, 10 OHMS DC RES.

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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Class 29—Electromagnetic Contact Devices

3.29-23

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CAY-29383	TCE-2	RELAY, OVERLOAD SPST, NORMALLY CLOSED, MANUAL RESET, RESETTING TIME 20 SECONDS ADJUSTMENT RANGE ± 10%. NORMAL SETTING 5.4 AMPS, CONTACT RATING: 5 AMPS. AT WORKING VOLTAGE, 1 AMP AT 440V AC. COIL DATA: 65 TURNS #13 EN. CU. WIRE, RATED 5.38 AMPS. 12/29/44 MG S#1186641 CAY:52-J-15 JAN. 45 COIL:S#1190153	CAY-29387		DATA: MAIN COIL: 6000 TURNS #30 CU WIRE, 115-125V DC CONT. 390 OHMS DC RES. AT 25°C. NENTRALIZING COIL: 1500 TURNS #29 CU WIRE. 16V DC CONT., 61 OHMS DC RES. AT 25°C.	CAY-29391		CONTINUOUS DUTY.
CAY-29384	TCE-2	CONTACTOR 3 PST, NORMALLY OPEN INTERLOCK. CONTACT RATING: 25 AMPS CONTINUOUS AT 600V 250 AMPS INTERMITTENT. COIL DATA: 220V, 60 CYCLES, 2750 TURNS #31 EN CU WIRE, 145 OHMS DC RES. SAME AS -29314 EXCEPT FOR #NDN-130,S#1190273 COIL:S#1224851 12/29/44 *SEE ABOVE CAY:32-J-682 JAN. 45	CAY-29388	TCE-2	RELAY OVERLOAD: SPST, NORMALLY CLOSED, MANUAL RESET, RESETTING TIME 20 SECONDS ADJUSTMENT RANGE +10%. RELAY SETTING 2.33 AMPS. CONTACTS RATED: 5 AMPS AT WORKING VOLTAGE: 1 AMP, AT 440V AC. COIL DATA: 150 TURNS #MG S#1186641 COIL: S#1190145 12/29/44 *SEE ABOVE CAY:32-J-15 JAN. 45	CAO-29392	QJB	MAGNETIC CONTACTOR 4PST CONSISTING OF A 3PST NORMALLY OPEN SWITCH AND AUXILIARY CONTACT SPST NORMALLY OPEN. MAIN CONTACTS RATED 440V 60-25 AMP, 300V DC 2 AMP, AUXILIARY CONTACTS RATED 115V 60-5 AMP. INCLUDES NAVY TYPE COIL 301620 RATED 450V 60-1/5/45 CAO:1124A CAO:16581.188 MAR. 45 COIL 125L3 ALT 0
CAY-29384		COIL VOLTAGE AND CYCLE OPERATION.	CAY-29388		#18 EN CU WIRE. RATED 2.33 AMPS.	CEE-29393	SF 8 SF 1	RELAY SPST, NORMALLY OPEN. CONTACTS RATED 2 AMPS. AT 115 VOLTS. HEATER RATED 110-120 VOLTS. TIME TOLERANCE 20 TO 45 SECONDS. AMBIENT 0-72°C. SPECIAL NON-MELTING BASE. 1/3/45 M11-CHR4-4AR SKETCH MAR. 45
CAY-29385	TCE	RELAY, OVERLOAD: SPST, NORMALLY CLOSED, MANUAL RESET, RANGE OF ADJUSTMENT -10%, +20%, OF NORMAL SETTING. NORMAL SETTING: 18 AMPS. RESETTING TIME: 20 SECONDS AFTER RELAY HAS BEEN TRIPPED WITH 125% OF FULL LOAD #TAN:S#860064 HEATER:K-8951D 12/29/44 *SEE ABOVE CAY:58-A-763 JAN. 45	CAY-29389	TCE	CONTACTOR: SPST WITH TWO AUXILIARY SINGLE POLE CONTACTS NORMALLY OPEN. CONTACT RATING: CONTACT WILL CLOSE AT 500 AMPS. DC AND CARRY 300 AMPS. CONTINUOUSLY. TIME DELAY VARIABLE FROM 0.5 SEC. TO 6 SECS. COIL #AT-14 S#845831 COIL: S#895677 12/29/44 *SEE ABOVE CAY:ENG. HAND BK. JAN. 45 PAGE 1175.0001	CAY-29394	TAB-6	CONTACTOR 3PST, NORMALLY OPEN, WITH 1 MAKE INTERLOCK PLUS 1 NORMALLY CLOSED L-42 INTERLOCK S#972893, WHICH IS A DOUBLE BREAK, SILVER CONTACT INTERLOCK UNIT COMPLETE IN ITSELF. CONTACT RATINGS: 25 AMPS AT 600V AC, 25 AMPS 440V 60 CPS CONTINUOUS; 1/10/45 NON-130 CAY:32-J-682 MAR. 45 COIL S#1264359 REV 7
CAY-29385		MOTOR CURRENT. CONTACTS RATED: 5 AMPS AT 600V CONT, 0.5 AMPS AT 230V AC INTERRUPTED, 1.2 AMPS AT 115V AC, INTERRUPTED, 6 AMPS AT AC TO 600 VOLTS, HEATER RATED 63 AMPS. OIL DASH POT TO PREVENT OPERATION DUE TO SHOCK.	CAY-29389		DATA: MAIN COIL -2500 TURNS #26 EN CU WIRE, 35 TO 40 VOLTS DC, CONTINUOUSLY 64.6 OHMS DC RES. AT 25°C NENTRALIZING COIL -620 TURNS #25 EN CU WIRE, 6.4V DC CONT. 9.5 OHMS DC RES. AT 25°C.	CAY-29394		250 AMPS AT 600V AC 150 AMPS 440V 60 CPS INTERRUPTING. COIL DATA: 115 VOLTS, 50/60- ± 10%, 0.25 AMPS, 1300 TURNS #30 WIRE. DC RESISTANCE 53 OHMS.
CAY-29386	TCE-1	CONTACTOR: SPST WITH TWO AUXILIARY SINGLE POLE CONTACTS NORMALLY OPEN. CONTACT RATING: CONTACT WILL CLOSE AT 500 AMPS DC AND CARRY 300 AMPS CONTINUOUSLY. TIME DELAY VARIABLE FROM 0.5 SECS. TO 6 SECS. COIL #AT-14S#845831 COIL: S#895675 12/29/44 *SEE ABOVE CAY:ENG. HAND BK. JAN. 45 PAGE 1175.0001	CAY-29390	TCE-1	RELAY, OVERLOAD: SPST, NORMALLY CLOSED, MANUAL RESET, CONTACTS RATED: 5 AMPS. CONT. AT 250 VOLTS, 1 AMP INTERMITTENT AT 250 VOLTS. COIL DATA: 320 TURNS #14 WIRE; RATED 4.7 TO 9.4 AMPS. NORMAL SETTING 7.6 AMPS. *KNSP S#1115387 COIL: S#276891 12/29/44 *SEE ABOVE CAY:ENG HAND BK. JAN. 45 PAGE 2114.12	CAY-29395	TBU	RELAY, OVERLOAD SPST, NORMALLY CLOSED, MANUAL RESET, RESETTING TIME 20 SECONDS, ADJUSTMENT RANGE -85% +115% OF RATING. CONTACT RATINGS: 5 AMPS. AT WORKING VOLTAGE OR 440V AC CONTINUOUS. 1 AMP. AT 440V AC. COIL DATA: 9.22 AMPS, 38 TURNS #11 WIRE. NO 1/11/45 MG S#1186641 CAY:32-J-15 MAR. 45 COIL: S#1190158 REV 9
CAY-29386		DATA: MAIN COIL: 12000 TURNS #33 CU WIRE 230-250V DC, 1600 OHMS DC RES. AT 25°C NENTRALIZING COIL: 3000 TURNS #32 CU WIRE, 32V DC CONT., 240 OHMS DC RES. AT 25°C.	CAY-29390		0.395 OHMS DC. RESISTANCE. OIL DASHPOT ON EACH PLUNGER.	CAY-29395		OIL DASHPOT.
CAY-29387	TCE	CONTACTOR: SPST WITH TWO AUXILIARY SINGLE POLE CONTACTS NORMALLY OPEN. CONTACT RATING: CONTACT WILL CLOSE AT 500 AMPS DC AND CARRY 300 AMPS CONTINUOUSLY. TIME DELAY VARIABLE FROM 0.5 SEC. TO 6 SEC. COIL #AT-14 S#845831 COIL: S#895676 12/29/44 *SEE ABOVE CAY:ENG. HAND BK. JAN. 45 PAGE 1175.0001	CAY-29391	TCE	CONTACTOR: 3 PST, ONE MAKE INTERLOCK. CONTACT RATINGS: 25 AMPS CONT. 115V AC, 150 AMPS. AT 115V AC 300 AMPS. AT 440V AC. COIL DATA: 115 VOLTS, 60 CYCLES, 1575 TURNS #29 EN CU WIRE, 56.5 OHMS DC RESISTANCE #DN-130-N S#973644 COIL: S#1091358 12/30/44 *SEE ABOVE CAY:74-A-790 JAN. 45	CAY-29396	TBU	RELAY, OVERLOAD SPST, NORMALLY CLOSED, CONTACT RATING: 1 AMP, INTERRUPTED AT 250 VOLTS, 5 AMPS. CONT. AT 250 VOLTS. MANUAL RESET. OIL DASHPOT ON EACH PLUNGER. COIL DATA: 33 AMPS, 68 TURNS #0.102 OCC WIRE, 0.024 *CHE*CC ENG. HDBK. PAGE 2114.12 1/12/45 KUSP S#1115387 CAY:33-J-719 MAR. 45 COIL: S#244715 P16 REV 12 *

RESTRICTED

NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
OHMS DC RES.		CAY-29396	CAUH-29401 SU-1			CCQ-29407		
			RELAY, TIME DELAY: COIL RATED 115V AC. RELAY OPERATES TWO SPST MICRO-SWITCHES NORMALLY OPEN. CONTACTS RATED 10 AMPS AT 125V. TIME DELAY -1 MIN. AND 1 MIN. 10 SEC.			WITHSTAND 200 HR. SALT SPRAY TEST.		
			1/13/45 HXS-251 CBM:746-430 JAN. 45 ALT 0					
CAY-29397	TBU-2		CCQ-29402 SU, SU-1			CLR-29408	SO-7M SO-7M	
RELAY, OVERLOAD SPST, NORMALLY CLOSED. CONTACT RATING: 5 AMPS. CONT. AT 250 VOLTS. 1 AMP. INTERRUPTING AT 250 VOLTS. MANUAL RESET. OIL DASHPOT ON EACH PLUNGER. COIL DATA: 36 TO 72 AMPS, NORMAL SETTING 50 AMPS, 50 * (WEMCO: ENG. HDBK. P. 2114.12) 1/12/45 KNXP S#1115387 CAY:33-J-720 MAR. 45 COIL: S#244784 P16 REV 9			RELAY: DPDT CONTACT MATERIAL PURE SILVER. CONTACT RATING: 5 AMPS, 24V DC, 110V AC. COIL DATA, 24V DC, 0.089 AMPS, 255.0 OHMS DC RESISTANCE. 4500 TURNS #36 ENAM. WIRE WITH CELLULOSE ACETATE INSULATION. RATED AT 2 WATTS. 1/13/45 BJD36 CBM:746-425 JAN. 45 ALT 0			RELAY: 3 SPT NORMALLY OPEN. CONTACTS RATED 15 A. 110V AC COIL DATA: 115V, 50-60~, 5500 TURNS #36 E WIRE, 530 OHMS DC RES. INTERLOCK RELAY FOR 400 CYCLE + AUX. RECTIFIER POWER. 1/15/45 X-1358 DEW CLR:LC-2340 JAN. 45 COIL:#374 CRP:71-5030		
			CAGK-29403 AN/ARQ-10			CCQ-29409	SO-7M/7M	
			RELAY, THERMAL TIME DELAY: SPST N.O. HERMETICALLY SEALED IN VACUUM TUBE ENVELOPE. ACTION OF THERMAL TIME DELAY TYPE. HEATER RATED 24V DC NOMINAL. RELAY CLOSING ON 19V. MINIMUM. TIME DELAY 30 ±10 SECONDS AT 25°C AMBIENT. SIMILAR TO CAGK-29271, EXCEPT FOR TERMINAL CON- 1/13/45 CAGK:24N031 CFT:NCP28-1-53 JAN. 45			RELAY: SPST, NORMALLY OPEN, DOUBLE BREAK PER CIRCUIT. CONTACTS RATED 50 AMPS. AT 12V DC, 50 AMPS AT 24V DC. COIL RATED 24V DC, -106 AMPS, 230 OHMS, 2.6 WATTS. SILVER CONTACTS. 1/15/45 B013D36 CRP:71-5042 JAN. 45		
			CAGK-29403			CDS-29410	SO-7M SO-7M	
			NECTIONS.			RELAY: DPST, NORMALLY OPEN. CONTACTS WILL CARRY 40 AMPS. COIL DATA: 12V DC, 1400 TURNS #29 E WIRE, 18 1/2 OHMS DC RES. STOP RELAY IN GENERATOR. 1/15/45 HRK-4001 CDS:HRK-01 JAN. 45		
CAY-29398	TBU-3		CATM-29404 SU, SU-1			CDS-29411	SO-7M/7M	
RELAY, OVERLOAD SPST, NORMALLY CLOSED. MANUAL RESET. ADJUSTMENT RANGE ±15%. RESETTING TIME 20 SECONDS. CONTACTS RATED: 5 AMPS AT WORKING VOLTAGE OR 440V AC. 1 AMP. INTERRUPTED AT 440V AC. COIL DATA: 20.6 AMPS, 17 TURNS 0.114 X 0.144 WIRE. 1/12/45 MG S#1186641 CAY:32-J-15 MAR. 45 COIL: S#1190166 REV 9			RELAY: DPDT. CONTACTS RATING: 10 AMPS AT 110V AC. SIZE OF CONTACTS 1/4". COIL DATA: 24V DC, TYPE JC COIL IMPREGNATION. OVER-ALL DIMENSIONS 2 21/32" X 1 5/8" X 1 1/2". 1/13/45 964B CBM:746-465 JAN. 45			RELAY: SPST, NORMALLY CLOSED. CONTACTS WILL CARRY 7 AMPS AT 6 VOLTS, OR 4 AMPS AT 12 VOLTS SATISFACTORILY. COIL RATED 12V DC 3400 TURNS #33 E WIRE, 102 TO 112 OHMS DC RESISTANCE. 1/15/45 TCA-4001 CDS:TCA-01 JAN. 45 REV. 8		
			CPB-29405 SU, SU-1			CAY-29412	MK 13	
			SOLENOID RELAY ASSEMBLY: COIL RATED 24V DC. CONSISTS OF AN OAK MFG. CO. ROTARY WAFER SWITCH #24867-H ACTUATED BY THE ROTOR OF THE SOLENOID. RESISTANCE OF PULL-IN COIL 7 OHMS, OF HOLDING-IN COIL 225 OHMS. 1/13/45 81-1 CBM:746-620 JAN. 45 ALT 0			AC CONTACTOR: CONSISTS OF NORMALLY OPEN, 4 PST SWITCH AND AUXILIARY SPST NORMALLY CLOSED INTERLOCK. COIL RATED 115V(+10-15%) 60 CPS (±5%) INITIAL CURRENT 1.35 AMPS, HOLDING CURRENT 0.25 AMPS. 35 OHMS DC RESISTANCE. MAIN CONTACTS RATED 440V AC 1/15/45 KS-15067 CW:KS-15067 JAN. 45 LIST 01 FIG 1 ISSUE 2		
			CLR-29406			CSD-29412		
			SP-1M			25 AMPS AND AUXILIARY CONTACTS RATED 115V AC 5 AMPS.		
			CONTACTOR: DPST, NORMALLY OPEN, ONE BREAK PER CIRCUIT. COIL RATED 10.5VA 115V, 50-60-. PICK-UP 90V, DROP-OUT 60 VOLTS. CONTACT RATING: 30 AMPS, 115V AC CONTINUOUS; 20 AMPS, 220V AC CONTINUOUS; 50 AMPS, 115V AC INTERMITTENT. 1/15/45 CLR:6104-298 CG:M-7474554 JAN. 45 PT 1 REV 1					
			CCQ-29407			CSD-29413	NMC-1	
			SO-7M/7M			RELAY: DPDT CONTACT RATING: 110V AC, 6 AMPS; 115V DC, 1 AMP. COIL DATA: 6V, 60~, 300 TURNS #25 WIRE, 1.8 OHMS DC RES. MAX RATING 1.520 AMPS WITH ARMATURE OPEN; MIN RATING .760 AMPS WITH ARMATURE CLOSED. 1/16/45 CS-1729A CBM:746-55 JAN. 45		
			RELAY: DPDT, AIRCRAFT TYPE. CONTACTS RATED 15 AMPS AT 12 V DC, 15 AMPS AT 24V DC, 15 AMPS AT 110V AC/1/60. 5 AMPS AT 115V AC/1/400. COIL RATED 30V DC CONT. DUTY. 106 AMPS DC RES. 230±7% OHMS, 205 WATTS. CORROSION PROTECTION OF ALL PARTS TO 1/15/45 B06D35 CRP:071-6015 JAN. 45 SUB. 3					
			±10% DC RES. TEHP RISE 36°C.					

Class 29—Electromagnetic Contact Devices

3.29-25

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CSD-29414	NMC-1		CGX-29420	SO12M/12N		CW-29427	QJB	
RELAY:			RELAY			RELAY, PLUG IN		
3 SPST NORMALLY OPEN, SINGLE BREAK, 115V, 60- ϕ , 3 CONTACTS, RATED: 6 AMPS AT 110V AC, 3 AMPS AT 220V AC, 1.5 AMPS AT 440V AC. COIL DATA: 5000 TURNS #38 WIRE, 605 OHMS DC RES. 500V INSULATION TEST, COIL TO CONTACTS.			3 PDT CONTACTS RATED 10 AMPS AT 24V DC. COIL RATED 24V DC, APP. 6290 TURNS #33 WIRE, CONTINUOUS DUTY. AMBIENT TEMP. 60°C. DC RESISTANCE 150 OHMS \pm 10% AT 25°C.			CONTACTS ARRANGED IN TWO BANKS. EACH BANK CONSISTS OF TWO SPDT CONTACTS. ONE SET OF SPDT CONTACTS IN EACH BANK OPERATE BEFORE OTHER SET. CONTACTS RATED AT 1 1/2 AMP AT 150V OFF GROUND, CARRYING ONLY. AND ON A SHORT PULSE BASIS. COIL		
1/16/45 CXM 1259 CBM:746-103			1/18/45 27-D-24V-3C CRP:71-5050			FEB. 45		
JAN. 45		ALT 0	FEB. 45			CH:D-169324 CW:3L-105848		ISSUE 1
CSD-29415	NMC-1 MCA-2		CCQ-29421	NXsr-53309		CW-29427		
RELAY, TIME DELAY THERMAL:			RELAY			HAS 1300 OHMS DC RES. AND WILL OPERATE AT 0.07 AMP. RELAY ENCLOSED IN MOISTURE RESISTANT METAL CASE.		
SPST, NORMALLY OPEN, TIME DELAY -40 SEC-0HMS \pm 5 SECONDS. CONTACT RATING: 1 AMP., 116 VOLTS, 60 CYCLES. HEATER RATING: 115V AC, 60 CYCLE DC RES. 850 OHMS \pm 10%.			SPST, DOUBLE MAKE, NORMALLY OPEN. CONTACT RATINGS 15 AMPS AT 115V AC NON-INDUCTIVE, 15 AMPS AT 32V DC NON-INDUCTIVE. COIL RATED 132 ϕ AC, OPERATED ON MIN. OF 92V, 60 CYCLES. DC RESISTANCE 445 OHMS \pm 5% AT 20°C.					
1/16/45 TD-311 CBM:746-245			1/18/45 BOX-91 CHZ:RL-1008					
JAN. 45		PVA-3	FEB. 45					
CW-29416	AH/FCC-1B		CCX-29422	SO-4 SO-12M/12N		CW-29428	QJB	
RECEIVER RELAY UNIT			RELAY TIME DELAY			RELAY, PLUG IN		
CONSISTS OF A WESTERN ELECTRIC 255 POLAR RELAY AND ASSOCIATED APPARATUS MOUNTED ON PANEL TO PERMIT DIRECT OPERATION OF A TELETYPEWRITER FROM NAVY TYPE CW-83000-A FREQUENCY MONITORING ASSEMBLY. UNIT INCLUDES A SPARE WE 255 RELAY.			SPST, NORMALLY OPEN. CONTACTS RATED 15 TO 20 AMPS AT 110V, 60 CYCLES. COIL RATED 115 VOLTS, 60 CYCLES. TIME DELAY 3 MIN. \pm 20 SECONDS RESET TIME 1 TO 5 SECS. WITH A MIN. OF .4 SECS. CONT. DUTY IS AMBIENT TEMP. -30°C TO +60°C. SJLVER			CONTACTS ARRANGED IN TWO BANKS. EACH BANK CONSISTS OF TWO DPDT CONTACTS. ONE SET OF DPDT CONTACTS IN EACH BANK OPERATE BEFORE OTHER SET. CONTACTS RATED AT 1 1/2 AMP. AT 150 VOLTS OFF GROUND, CARRYING ONLY. AND ON A SHORT PULSE.		
1/15/45 CWX-61790Y-L1			1/18/45 C3M CRP:71-5087			FEB. 45		ISSUE 1
JAN. 45			FEB. 45			CH:D-169326 CW:3L-105903		
CATH-29417	NMC-1		CCX-29422			CW-29428		
RELAY			CONTACTS NON-ADJUSTABLE SETTING.			COIL HAS 1300 OHMS DC RES. AND WILL OPERATE AT 0.07 AMP. RELAY ENCLOSED IN MOISTURE RESISTANT METAL CASE.		
DPDT CONTACTS RATED 10 AMPS AT 115V AC. COIL RATING: 6 VOLTS AC, 60 CYCLES, 250 TURNS #22 PE WIRE, 1.5 AMPS., 1.0 OHM DC RESISTANCE. NON-INDUCTIVE.								
1/17/45 CATH:1000R88 CBM:746-368								
JAN. 45		SA:3000X-R88						
CEE-29418	SO-1 SO-8		CAY-29423	VE		CAUH-29429	HK 8 MOD 4	
RELAY, THERMAL TIME DELAY			RELAY, CIRCUIT BREAKER			RELAY, TIME DELAY		
SPST CONTACTS NORMALLY OPEN AND RATED 2 AMPS AT 115 VOLTS. THEY CLOSE AND REMAIN CLOSED AT ANY HEATER POTENTIAL FROM 100 TO 130V DC. AMBIENT TEMP. RANGE ϕ -30°C TO +65°C. CONTINUOUS SERVICE AT 130 VOLTS, 65°C. ALL ENCLOSED IN A GLASS TUBE WITH 4 PRONG BASE.			DP-ST. RATED 110 TO 220V SINGLE PHASE FOR 8.8 TO 10.0 AMPS. AC. 32, 115, 250V AT 8.8 TO 10.0 AMPS AC. NORMALLY CLOSED.			\pm 10 SEC EQUIPPED WITH 2 SPST NORMALLY OPEN MICRO-SWITCHES.		
1/18/45 B-1501 CRP:L71-5016			1/19/45 CAY:S#831320 CAY:T-7611189/P42			2/2/45 HXS-259		CAY:9-B-6507
JAN. 45		REV 2	FEB. 45	TYPE H	REV. 11	FEB. 45		CHANGE 2
CEE-29418			CCQ-29424	SR-2		CAUH-29430	HK 8 MOD 4	
TUBE WITH A 4 PRONG BASE.			RELAY			RELAY, TIME DELAY		
			DPDT SINGLE BREAK. CONTACTS RATED 5 AMPS AT 24V DC OR 110V AC. 2 WATTS. COIL DATA: 24V AC. 1625 TURNS OF #32E, 38 Ω DC RES.			115V 60 CYCLES 20 SECOND TIME DELAY \pm 2 SECONDS EQUIPPED WITH SPDT MICRO-SWITCH.		
			1/24/45 BJ6A24 CRV:P-719836			2/2/45 HXS-266		CAY:9-B-6507
			MAY 45			FEB. 45		CHANGE 2
CEE-29419	SO-7H/7N SD-2		CCQ-29425	AN/APA-12a		CSZ-29431	OBV	
RELAY, THERMAL TIME DELAY			RELAY, DC:			THERMO-SWITCH		
SPST CONTACTS NORMALLY OPEN AND RATED 2 AMPS AT 115 VOLTS. HEATER POTENTIAL 95 TO 130V AC. 400 CYCLES. AMBIENT TEMP. RANGE -30° TO +65°C. TIMING 30 TO 56 SECS. AT -30° TO +50°. ALL ENCLOSED IN A GLASS TUBE WITH 4 PRONG BASE. SIMILAR TO			DPST NORMALLY CLOSED. CONTACTS RATED 24V 5 AMPS NON-INDUCTIVE COIL: PULL IN AT 20 VOLTS - FAIL TO PULL IN AT 16 VOLTS. COIL RESISTANCE 430 OHMS. C.T.			SPST, NORMALLY CLOSED, 24V, 10 AMPS.		
1/18/45 B-1502 CRP:71-5024			1/30/45 BJX 27 CAPP:131-1			2/5/45 AL-9300		CALG:A77
FEB. 45		REV. 2	FEB. 45		ALT 0	FEB. 45		
CEE-29419			CCQ-29426	AN/APA-12a		CW-29432	UP	
-29418 EXCEPT FOR AC OPERATION.			RELAY, DC			ALARM AND SPARE PARTS PANEL		
			DPDT, MECHANICAL LATCHING, ELECTRICAL RESET. CONTACTS RATED 24V 5 AMPS. NON-INDUCTIVE. COIL: PULL IN AT 18 VOLTS AND FAIL TO PULL IN AT 14 VOLTS DC. RESISTANCE EACH COIL 10 OHMS DC.			A STEEL PANEL EQUIPPED WITH ALARM RELAYS, SPARE VACUUM TUBES, SPARE POLAR RELAYS AND SPARE FUSES.		
			1/30/45 BJUX 10 CAPP:131-2			1/18/45 X-66421E-1		X-66421E-1
			FEB. 45		ALT 0	FEB. 45	FIG. D	ISS. 3

RESTRICTED

NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CG-29433 UP FUSE PANEL AN IMPREGNATED ASBESTOS PANEL EQUIPPED WITH ALARM. TYPE FUSES FOR THE 6.3V AC AND THE POSITIVE & NEGATIVE 130 VOLT SUPPLIES. ALSO SERVES TO HOLD A LIMITED NUMBER OF SPARE FUSES OF EACH TYPE. 1/18/45 X-66421E-1 X-66421E-1 FEB. 45 FIG. C ISS. 3			CG-29439 60 CYCLES. 2450 TURNS OF 17.9 MILWIRE. 34.5±10% OHMS DC RESISTANCE. SP-ST DOUBLE CONTACT ARRANGEMENT.			CCX-29447 TEB RELAY. TIME DELAY: DPST, ONE CONTACT NORMALLY OPEN ONE NORMALLY CLOSED. ONE BREAK PER CIRCUIT. CONTACTS RATED 5 AMPS. AT 230 VOLTS, 60 CYCLES. COIL RATED 30 MA -230 VOLTS. COIL SEALED IN MOTOR 1811 RPM. CLUTCH UNIT. 1-WAY FRIC. LEFT ROTATION MOTOR. 2/15/45 TDSA CCX:A50-3 MAR. 45 MIG #44543		
CG-29434 UP POWER TEST AND ALARM PANEL A STEEL PANEL EQUIPPED WITH ALARM RELAYS RESISTORS, FUSES, JACKS, POWER FILTER, CONVENIENT OUTLET, & SWITCH. TERMINAL & WIRING FOR POWER APPARATUS ARE INCLUDED IN METAL BOX WITH REMOVABLE COVER. 1/18/45 X-66691A-1 X-66691A-1 FEB. 45 FIG. 2 U & RU ISS 3			CG-29440 SP-1M 17R6 RELAY: 115V WORKING 50/60 CYCLES. DPST, 2 NORMALLY OPEN, 2 NORMALLY CLOSED CONTACTS. RATED 12 AMPS. 115V AMBIENT TEMP. 0°C TO 60°C AT 80% TO 120% NORMAL VOLTAGE. COIL DATA: 4150 TURNS OF 5 MILSWIRE 405 OHMS ±10% DC RES. 2/13/45 12HMA19AGN CG:P-7756375-PI MAR. 45 REV 5			CCX-29447 MAX AND MIN ADJUSTMENT VALUES 10 SEC 2 SEC.		
CRY-29435 QGB RELAY (KEYING) 3 PST. 2 NORMALLY OPEN AND ONE NORMALLY CLOSED. ONE BREAK-MAKE BEFORE BREAK - ONE. MAKE EACH ASSEMBLY. CONTACTS RATED 4 AMPS AT 200 WATTS. COIL RATED 50V DC WITH 500 OHMS RESISTANCE. CONSISTS OF 11,800 TURNS #34 E WIRE. 2/6/45 TYPE "C" CRV:W-306507/P183 FEB. 45 CAT.#A-6289 REV. 6			CLR-29441 WCA RELAY: DPST WITH SP NORMALLY OPEN KEYING CONTACT. COIL RATED 100V DC±10%, 4200 OHMS 360 AMPS. DROP OUT VOLTAGE 13V DC; PULL IN VOLTAGE 50V DC. CONTACT RATING 8 AMPS 120V AC. 2/14/45 2058-S-MX CBM#H746-140 MAR. 45 ALT 0			CAU-29448 SP-1M RELAY ASSEMBLY COMPOSED OF 2 FORM C SPRING CONTACT ASSEMBLIES RATED 1 AMP 30 VOLTS, AND 1 SPDT MICRO SWITCH RATED AT 10 AMPS 125V AC, 5 AMPS 250V AC, 3 AMPS 400V AC, 2 AMPS 600V AC COIL RATING 56 VOLTS, 1800 OHMS. 0.020 AMPS DC MAX. 2/12/45 TYPE AMS M-7469248-1 MAR. 45 CAT#H-77030-1 REV 2		
CAU-29436 QGB RELAY (KEYING) 5PST NORMALLY OPEN. CONTACTS RATED 3 AMPS, DC 110 WATTS. COIL DATA: 50V. 19, 700 TURNS #36 ECC WIRE. DC RES. IS 1250 OHMS ±100 OHMS. 2/6/45 ZR-3186-0393 CRV:W-306502/P135 FEB. 45 REV. 8			CSD-29442 WCA RELAY: SPST DOUBLE BREAK NORMALLY CLOSED. COIL RATED 110V, 60 CYCLES. CONTACTS RATED 6 AMPS 115V AC, 0.5 AMPS 115V DC, 3 AMPS 230V AC. 2/14/45 1XXH107 CBM:T-746-128 MAR. 45 ALT 0			CG-29449 SP-1M 17C10 CONTACTOR: NAVY SERVICE A 8 PST, 1 BREAK PER CIRCUIT; TWO NORMALLY OPEN STATIONARY CONTACTS AND TWO NORMALLY CLOSED STATIONARY CONTACTS. COIL RATED 0.6 AMPS CLOSED; 6 AMPS IN RUSH, 115V, 60 CYCLES. TOTAL RESISTANCE 4.9 OHMS. TOP WINDING 600 TURNS 0.0159" WIRE 2/12/45 CR-5131-2H6 CG:P-7767316-1 APR. 45 #3243152 COIL REV 1		
CG-29437 QGB RELAY 3PST NORMALLY CLOSED. CONTACTS RATED 3 AMPS, 115V AC RESISTIVE LOAD. COIL DATA: RATED 115V, 60 CYCLES. 6000 TURNS 0.0045" DIA. WIRE WITH 590 OHMS ±10% DC RESISTANCE. 2/6/45 CR-2750-G10GH2 CG:K-8270931 FEB. 45 REV. 3			CSD-29443 WCA RELAY: DPST SINGLE BREAK. NORMALLY OPEN. COIL RATED 110V, 50 CYCLES, 605 OHMS DC RES. MAX RATING ARMATURE OPEN 92 MA. MIN RATING ARMATURE CLOSED 54 MA. CONTACTS RATED 115V AC, 6 AMPS AND 115V DC, 1/2 AMP. 2/14/45 CXF-1898 CBM:T-746-202 MAR. 45 ALT 0			CG-29449 BOTTOM WINDING 412 TURNS 0.0226" WIRE. MAIN CONTACTS RATED 50 AMPS, 440V, 60 CYCLES.		
CGX-29438 SP-1M RELAY: SPST NORMALLY CLOSED. CONTACTS RATED 10 MA AT 50V, WITHSTAND 800V RMS 60 CYCLES BETWEEN CONTACTS AND FRAME. COIL DATA: 4000 OHMS MAX. WITHSTANDS 1000V RMS 60 CYCLES H. POT BETWEEN COIL AND FRAME CG:K-52521 REV 2 SPEC M-1076 REV 2 2/13/45 12417-1 SEE ABOVE MAR. 45			CSD-29444 WCA RELAY: DPST NORMALLY OPEN AND SPDT. COIL RATED 110V±15%, 60 CYCLES, 605 OHMS DC RES. MAX RATING ARMATURE OPEN, 92 MA; MIN. RATING ARMATURE CLOSED 54 MA. CONTACTS RATED 115V AC, 6 AMPS, 115V DC 1/2 AMP. 2/14/45 CXC-3251 CBM:T-746-238 MAR. 45 ALT. 0			CLR-29450 WCA RELAY DPST WITH SP NORMALLY OPEN KEYING CONTACT. COIL RATED 75V DC, 4200 OHMS, 360 AMPS. DROP OUT VOLTAGE 13V DC. PULL-IN VOLTAGE 60V DC. CONTACTS RATED 8 AMP AT 120V AC. 2/12/45 2058-S-MX CBM:746-140 MAR. 45 ALT 0		
CGX-29438 12,150 TURNS OF #39 CU WIRE 2000 OHMS TO 10% DC RES. AMBIENT TEMPERATURE -40°C TO +90°C.			CEE-29445 WCA RELAY. THERMAL TIME DELAY: NORMALLY OPEN; CONTACTS RATED 3 AMPS AT 115V 60~. HEATER 1500 OHMS; INTERMITTENT OPERATION, 45-60, SECOND DELAY. SEALED IN GLASS WITH MEDIUM 4-PRONG UX BASE. 2/14/45 B-1503 CBM:803-147 MAR. 45 ALT. 0			CAU-29451 TEB RELAY INCLUDES A 24 VOLT DC COIL AND 2 LEVELS OF CONTACTS. 10 CONTACTS PER LEVEL. POSITION NORMALLY OPEN. 10 BREAKS PER CIRCUIT. CONTACTS RATED 24V. CARRY 3 AMPS. MAKE OR BREAK MAX. 0.1 AMP. MIN. OPERATING CURRENT ROTARY 0.4 AMPS. RELEASE 2/15/45 H-77844-1 CAU:SKETCH MAR. 45		
CG-29439 SP-1M 17R6 RELAY TIMING: ON ENERGIZING, CONTACT TAKES FROM 45 TO 90 SEC TO CLOSE. ON DEENERGIZING, CONTACTS OPEN WITHIN 5 TO 10 SECONDS. CONTACT RATINGS 0.5 AMPS AT 125V DC, 0.2 AMPS AT 250V DC, 2.5 AMPS AT 125V AC, 1.0 AMPS AT 250V AC. COIL DATA: 115V, 2/13/45 PQ-26N CG:P-7766383-PI MAR. 45 REV 8			CCX-29446 TEB RELAY TIME DELAY: SPDT, ONE CONTACT NORMALLY OPEN, ONE NORMALLY CLOSED. ONE BREAK PER CIRCUIT. CONTACTS RATED 5 AMPS. AT 230 VOLTS, 60 CYCLES. COIL RATED 30 MA -230 VOLTS 60 CYCLES, 1600 RPM, 1/30 HP. MAX & MIN ADJUSTMENT VALUES 30 MIN TO 90 SECS. 2/15/45 TDIC-30X CCX:A50-2 MAR. 45 MIG #44554C			CAU-29451 0.27 AMPS.		

Class 29—Electromagnetic Contact Devices

3.29-27

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
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CCX-29452 TEB
RELAY TIME DELAY
SPST. NORMALLY OPEN. ONE BREAK PER CIRCUIT. CONTACTS RATED 5 AMPS. 230V. 60 CYCLES. COIL RATED 30 MA. 230 VOLTS. COIL SEALED IN MOTOR. 1600 RPM. CLUTCH UNIT. RIGHT ROTATING MOTOR. MAX 4 MIN. ADJUSTMENT VALUES 60 SEC. TO 3 SEC.
2/15/45 TDI-60S A50-1
JUH. 45 MTG.#44554D

CCX-29453 TEB
RELAY TIME DELAY
SPST NORMALLY OPEN. ONE BREAK PER CIRCUIT. CONTACTS RATED 5 AMPS. 230 VOLTS. 60 CYCLES. COIL RATED 30 MA. 230 VOLTS. COIL SEALED IN MOTOR 1600 RPM. CLUTCH UNIT RIGHT ROTATION MAX 4 MIN ADJUSTMENT VALUES 120 SECS. TO 3 SECS.
2/15/45 TDI-120S CCX:150-1
MAR. 45 MTG.#44554B

CBZ-29454 TEB
CONTACTOR. FILAMENT
4PST. TWO NORMALLY OPEN. TWO NORMALLY CLOSED. TWO BREAKS PER CIRCUIT. CONTACTS RATED 10 AMPS AT 230 VOLTS. COIL RATED 230V. 60 CYC. 0.44 AMPS. INRUSH. 0.098 AMPS SEALED. 5.8 WATTS. 270 OHMS RESISTANCE TYPE B220 #435473. COIL: RC-2-33441
2/19/45 BULLETIN 700 CBZ:Y-5536-D
MAR. 45 SEE ABOVE

CBZ-29454
TANCE. 3030 TURNS #34 WIRE. NON-ADJUSTABLE. SIZE - 3 5/8" X 2 3/4" X 3 5/16".

CAY-29455 TEB
RELAY INTERLOCK
OPST, ONE BREAK PER CIRCUIT. TWO REVERSIBLE CONTACTS CAN BE ARRANGED FOR 2 MAKE 2 BREAK OR ONE MAKE ONE BREAK. RATED 5 AMPS 125V DC. 115V AC. WILL BREAK 1 AMP. DC OR 5 AMPS AC AT THOSE VOLTAGES. COIL RATED 0.5-2 AMPS DC TO 60
2/19/45 SC-1 S#1096943 CAY:77-D-418
MAR. 45

CAY-29455
CYCLE. SELF-RESET. 0.5-2 AMPS CONTINUOUSLY ADJUSTABLE. INSTANTANEOUS TRIP. SIZE - 2 15/16" X 5 11/32" X 5 1/32".

CBZ-29456 TEB
RELAY. LOCKOUT
3PDT. 2 NORMALLY OPEN. ONE NORMALLY CLOSED. 2 BREAKS PER CIRCUIT. CONTACTS RATED 230V. 60 CYCLES. COIL RATED 230V 60 CPS. 0.44 AMPS. INRUSH. 0.098 AMPS SEALED. 5.8 WATTS. 270 OHMS DC RES. TYPE B-210 #435475. COIL: IRC-2-33441
2/19/45 BULLETIN 700 CBZ:Y-5536-D
MAR. 45 SEE ABOVE

CBZ-29456
3030 TURNS #34 WIRE. NON-ADJUSTABLE.

CAY-29457 TEB
RELAY. OVERLOAD
OPST. EQUIPPED WITH 2 REVERSIBLE CONTACTS. CAN BE ARRANGED FOR DOUBLE CLOSING. DOUBLE OPENING OR ONE OPENING AND CLOSING. CONTACTS RATED 5 AMPS. 125V DC. 115V AC. WILL BREAK 1 AMP DC OR 5 AMPS AC OR SAME. VOLTAGE COIL RATED 2-8 AMPS
2/19/45 SC-1 S#1096945 CAY:77-D-418
MAR. 45

CAY-29457
DC TO 60 CYCLES. INSTANTANEOUS TRIP. ADJUSTMENT CONT. 2-8 AMPS.

CAY-29458 TEB
RELAY OVERLOAD:
OPST. EQUIPPED WITH TWO REVERSIBLE CONTACTS. CAN BE ARRANGED FOR 2 MAKE. 2 BREAK OR 1 MAKE. 1 BREAK RATED 5 AMPS 125V DC. 115V AC WILL BREAK 1 AMP DC OR 5 AMPS AC AT THOSE VOLTAGES COIL RATED 1-4 AMPS CONTINUOUSLY ADJUSTABLE. SELF-
2/19/45 SC-1S#1096944 CAY:77-D-418
MAR. 45

CAY-29458
SETTING. INSTANTANEOUS TRIP.

CAO-29459 TEB
RELAY. SENSITIVE:
SPDT. ONE NORMALLY OPEN. ONE NORMALLY OPEN. CONTACTS RATED 2 AMPS. 110 VOLTS AC. 1.5 AMP 220V AC. 0.75 AMP. 115V DC 0.5 AMP. 230V DC. COIL VACUUM IMPREGNATED. 1950 OHMS DC RESISTANCE. SIZE 2 5/8" X 2 5/8" X 1 5/8".
2/19/45 SPECIAL BULLETIN CAO:2645P-18J
MAR. 45 #250COIL#119L158

CAY-29460 TEB
CONTACTOR:
3P NORMALLY OPEN. CONTACTS RATED 300 AMP. 230 VOLTS DC. 60 CYCLE. 3 PHASE. COIL RATED 230V. 60 CYCLES. 350 TURNS #12 OCC WIRE
*CLASS 15-825 FRAME 65-F-5 SIZE 5 COIL: S#943113
2/19/45 SEE ABOVE CAY:63-C-764
MAR. 45 SUB 1

CAY-29461 TEB
CONTACTOR
3 POLES. NORMALLY OPEN. ONE BREAK PER CIRCUIT. CONTACTS RATED 50 AMPS 220V AC. COIL RATED 220V. 60 CYCLES. 1340 TURNS OF #25 WIRE. SIZE 9 3/4" X 9" X 5".
*S#939431 DN230 CLASS 15-825 SIZE 2
COIL: S#974135
2/19/45 SEE ABOVE CAY:59-D-334
MAR. 45 SUB 3

CAY-29461
STANDARD OPEN LINESTARTER. (WITHOUT ENCLOSURE).

CAY-29462 TEB
CONTACTOR:
THREE POLES. NORMALLY OPEN. WITH 4TH POLE SERVING AS INTERLOCK. CONTACTS RATED 25 AMPS. 220V. 60 CY AC. COIL RATED 220V. 60 CYCLES. 2750 TURNS OF #31
*S#1128819 DN040 CLASS 15-825 SIZE 0
COIL S#1115655
2/20/45 SEE ABOVE CAY:55-0-922
MAR. 45 SUB 4

CAY-29462
UNIVERSAL WIRE. SIZE 6 1/4" X 4 5/16" X 3 1/2". STANDARD OPEN LINE-STARTER WITHOUT OVERLOAD RELAYS.

CAY-29463 TEB
CONTACTOR. PLATE:
THREE POLES. NORMALLY WITH 4TH POLE SERVING AS INTERLOCK. CONTACTS RATED 15 AMPS. 220V. 60 CYCLE. RATED 220V. 60 CYCLES. 4050 TURNS OF #33 WIRE. SIZE
*S#1128819 DN040 CLASS 15-825 SIZE 0
COIL: S#1115655
2/20/45 SEE ABOVE CAY:55-0-922
MAR. 45 SUB 4

CAY-29463
4 5/16" X 6 1/4" X 3 1/2". LINESTARTER WITHOUT ENCLOSURE AND OVERLOAD RELAYS.

CAY-29464 TEB
CIRCUIT BREAKER. THERMAL:
DPST. NORMALLY OPEN. ONE BREAK PER CIRCUIT. CONTACTS RATED 250V AC. 125V DC. THERMAL ONLY 15 AMPERES RATING. FIXED SETTING.
*S#999082 "E" FRAME CLASS 29060 TYPE 1015702
2/21/45 SEE ABOVE CAY:75-A-957
MAR. 45 SUB 26

CAY-29465 TEB
CIRCUIT BREAKER. THERMAL:
3 PST. NORMALLY OPEN. ONE BREAK PER CIRCUIT. CONTACTS RATED 250V AC. 125V DC. THERMAL ONLY -25 AMPERES RATING. FIXED SETTING.
*S#999024 "E" FRAME CLASS 29060
2/21/45 SEE ABOVE CAY:75-A-958
MAR. 45 SUB 27

CAU-29466 SP-1M
RELAY:
2 DOUBLE-THROW CONTACTS. RATED 2 AMPS. 115V±10%. OPERATION BETWEEN LIMITS OF 0°C & +50°C. COIL RATED 115 VOLTS. 60 CYCLES.
2/23/45 "FQA" CG:M-8376876-P21
MAR. 45 REV 0

CAU-29467 SP-1M
RELAY:
4 CONTACTS. NORMALLY OPEN. 3 POSITION POLARIZED. RATED 115V. 60 CYCLES. 3 AMPS. AMBIENT TEMPERATURE 0° TO +50°C. COILS: 2 COILS IN SERIES. TOTAL =28,400 TURNS OF 38 E WIRE 3500 OHMS DC RES. BOTH COILS EQUAL. INPUT VOLTAGE AMPLIFIED WITH
2/23/45 PHD CG:M-8376874-P21
MAR. 45 REV 0

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RESTRICTED

NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
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MECHANICAL RECTIFIER. CAU-29467

OPEN AND 65 MA MIN WITH ARMATURE CLOSED. CATM-29474

OF CLOSE SYNCHRONISM. VACUUM TUBE TYPE OCTAL BASE. CRY-29481

CAU-29468 SP-1M
RELAY:
CONSISTS OF 2 SETS OF CONTACTS, EACH 4PDT; RATED 3 AMPS. AMBIENT TEMP. 0°C TO + 50°C. COIL RATED APPROX. 80V DC, 75 MA.

CBZ-29475 SO-S0a
RELAY:
SPST - DOUBLE BREAK, NORMALLY CLOSED. CONTACTS RATED 75 AMPS 24 VOLTS DC. COIL HAS 2900 TURNS #28 WIRE, 68 OHMS DC RES. AT 24 VOLTS DC.

CCX-29482 SP-1M
RELAY, TIMING
MADE UP OF A SYNCHRONOUS MOTOR AND A CONTACT SWITCH. 3 SECOND IMPULSE EVERY 8 SECONDS. MOTOR HAS ONE NORMALLY OPEN AND ONE NORMALLY CLOSED CONTACT, RATED 115/1/60. CONTACT SWITCH RATED 110V, 60 CYCLES, 10 AMPS. AT 20,000 TO 40,000, 3/6/45 1PSB-8S CG:M-7472744
MAR. 45 REV 2

2/23/45 AQA CG:M-8576875-P21
MAR. 45 REV 1

2/27/45 X-89309 CRP:71-5017
MAR. 45 COIL#RDB-6229 SUB 0

CCX-29469 SP-1M
RELAY, TIME DELAY:
SINGLE NORMALLY CLOSED CONTACT, 115V, 50/60 CYCLES, FRONT CONNECTED, COIL 3900 TURNS OF #37E WIRE, 516 OHMS DC RESISTANCE.

CGT-29476 SP-1M
CIRCUIT BREAKER, THERMAL:
2PST 25 AMP AT 250 VOLTS AC. MANUAL BREAKER, FOR PANEL MOUNTING WITH END TERMINALS. MAX INTERRUPTING RATINGS 5000 AMPS. RMS AT RATED VOLTAGE. PHENOLIC FRAME.

CCX-29482
10 AMPS AT 24-28V DC. FROM SEA LEVEL TO 20,000 FT. 15 AMPS, 17 AMPS AT 12V DC ABOVE 20,000 FT., 25 AMPS TO 20,000 FT. WITHSTANDS SALT SPRAY TEST OF 200 HRS.

2/23/45 445P16 CG:M-8576877/P22
MAR. 45 REV 10

2/28/45 AT-21025 CG:P-7767053 P8
MAR. 45 REV 2

CG-29470 SP-1M 17-C-10
CONTACTOR:
4 CONTACTS, NORMALLY OPEN, RATED 15 AMPS. COIL: 115V, 60 CYCLES: 1540 TURNS OF 0.0113" E WIRE; 45 OHMS DC RESISTANCE. 600V RMS TEST VOLTAGE.

CGT-29477 SP-1M
CIRCUIT BREAKER, THERMAL:
2PST 225 AMPS AT 250 VOLTS AC. MANUAL BREAKER FOR PANEL MOUNTING WITH END TERMINALS. MAX INTERRUPTING RATINGS 10,000 AMPS. RMS AT RATED VOLTAGE. PHENOLIC FRAME.

CRY-29483 UL 17-R-6
RELAY
CONSISTS OF 28,000 TURNS #37 EC WIRE OF 2500 OHMS RESISTANCE, 120V OPERATE, 0.008 SEC. RELEASE 0.010 SEC.

2/23/45 CR-2820-1746 CG:P-396664 P 21
MAR. 45 REV 0

2/28/45 AT-23225 CG:P-7767054P5
MAR. 45 REV 3

3/8/45 TYPE CE
MAR. 45 A-20804

CGE-29472 CAJP-28AAA
RELAY:
3 PDT, CONTACTS RATED 115V AC, 2900 OHMS COIL RES. INSTANTANEOUS PICKUP AND RELEASE. OVERALL DIMENSIONS: 2 1/32" X 1 11/16" X 1 11/16".

CGT-29478 SP-1M
CIRCUIT BREAKER:
2PST 50 AMPS AT 250 VOLTS AC. MANUAL BREAKER FOR PANEL MOUNTING WITH END TERMINALS. MAX INTERRUPTING RATINGS 5000 AMPS. RMS AT RATED VOLTAGE. PHENOLIC FRAME.

CCQ-29484 UL 17-R-6
RELAY INTERLOCK
CONTACTS RATED 115V - 6 AMPS. NORMALLY OPEN OR CLOSED POLE.

2/24/45 AC-SERIES 340 CAJP-D82899
MAR. 45

2/28/45 AT-21050 CG:P-7767053P10
MAR. 45 REV 2

3/8/45 BC-GA-115
MAR. 45

CATM-29473 QBE-2
RELAY:
DPDT WITH SPST NORMALLY OPEN KEYING CONTACT. SILVER PLATED CONTACTS RATED 10 AMPS AT 115 VOLTS AC. COIL RATED 75 VOLTS DC; RES 1300 TURNS #39E WIRE; 2500 OHMS DC RESISTANCE. 34 MA MAX WITH ARMATURE OPEN AND 28 MA MIN WITH ARMATURE
2/24/45 400-1B CBM:746-211
MAR. 45 ALT 0

CRY-29479 MAR
RELAY:
4PST, NORMALLY OPEN, DOUBLE BREAK. COIL: 16,200 TURNS #34 EC WIRE, 750 OHMS DC RES. HERMETICALLY SEALED.

CCQ-29485 UL 17-R-6
RELAY
RATED 87V DC, 5000 OHMS, DPDT COIL CONSISTS OF #42 WIRE, AT 0.0094, 0.75V. MAX VOLTAGE NOT TO EXCEED 20% OF MIN VOLTS OR 80% OF NOMINAL VOLTAGE.

CATM-29473

CLOSED; NON-INDUCTIVE LOAD.

2/28/45 TYPE "C" CRV:P-722609
MAR. 45 A-20220 SUB 1

3/8/45 BOY-6D42
MAR. 45

CRY-29480 MBM
RELAY
DPDT, COIL RATED 5.5 TO 6.6V DC 45 OHMS DC RES. CONTACTS CAPABLE OF MAKING OR BREAKING 50 WATTS (MAX 1 AMP. RF AT 4 TO 14 MC) AND 50 WATTS NON INDUCTIVE LOAD (MAX CURRENT .125 AMP).

CAVR-29486 SO-1
CENTRIFUGAL SWITCH
SPST, NORMALLY OPEN; OPERATES AT APPROX. 3450 RPM; CONTACTS RATED 3 1/2 AMPS MAX.

3/2/45 A-18206
MAR. 45

*CRP:SPEC S-28-5095-1 ISSUE 1
3/3/45 DS-1X CRP:V28-5095-1
MAR. 45 REV 0 *

CATM-29474 QBE
RELAY:
DPDT. SILVER PLATED CONTACTS RATED 10 AMPS AT 110 VOLTS AC; NON-INDUCTIVE LOAD. COIL RATED 90 TO 115 VOLTS, 60 CPS; HAS 5000 TURNS #35E WIRE WITH 425 OHMS ±10% DC RESISTANCE. 84 MA MAX WITH ARMATURE *EXCEPT FOR MTG. BRACKETS.
2/24/45 SA#3000X CBM:746-305
MAR. 45 COIL: #68A ALT 3 *

CRY-29481 SP-1M
RELAY
DPDT, 2 CONTACTS NORMALLY OPEN, 2 CONTACTS NORMALLY CLOSED, TWO SETS OF TYPE "C" PALLADIUM #18 CONTACTS RATED 3 AMPS, 115V A.C. COIL HAS RESISTANCE OF 11,300 OHMS; 57,500 TURNS OF #40 E.C. WIRE. FUNCTION - TO PICK UP WHEN SYSTEM IS OUT
3/6/45 A-13751 CG:K-8681412
MAR. 45 REV 1

CAVR-29487 SO-8
CENTRIFUGAL SWITCH
SPST, NORMALLY OPEN; OPERATES AT APPROX. 3450 RPM; CONTACTS RATED 3 1/2 AMPS MAX.

*CRP:SPEC S-28-5095-2 ISSUE 1
3/8/45 DS-1X-N CRP:V28-5095-2
MAR. 45 REV 0 *

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CSQ-29488	SO, SOa		CAY-29492			CQE-29499		
<p>CIRCUIT BREAKER, THERMAL TRIP: SPST, NORMALLY CLOSED. CONTACTS RATED 120 AMPS AT 120 VOLTS, CONTINUOUS AT 77°F, ACTUATED BY THERMOSTATIC DISC. THIS CIRCUIT BREAKER AUTOMATICALLY RESETS ITSELF A SHORT TIME AFTER OPENING. IF AN OVERLOAD STILL EXISTS THR BREAKER 3/9/45 KLIXON CATALOG MAR. 45 PLAS-120 SHEETS.</p>			<p>COIL TO FRAME.</p>			<p>25.6 OHMS DC RESISTANCE AND 250 OHMS IMPEDANCE. PULL UP TYPE WITH BRACKETS FOR SIDE OR TOP MOUNTING.</p>		
CSQ-29488			CATH-29493	QGA		CAU-29500	JT	
<p>WILL AGAIN REOPEN IF THE OVERLOAD CONDITION IS CORRECTED, THE BREAKER REMAINS CLOSED. STUD TYPE TERMINALS.</p>			<p>RELAY, CONTROL: 4PST, NORMALLY OPEN. SILVER CONTACTS RATED 5 AMPS 115V AC. COIL RATED 115V AC 4300 TURNS OF #34E WIRE, 280 OHMS ± 10% DC RES. MAX. RATING ARMATURE OPEN -84 MA MIN. RATING ARMATURE CLOSED 65 MA.</p>			<p>RELAY: CONSISTS OF 30,600 TURNS #38 B&S EN WIRE OF 3300 OHMS DC RES. 115V, 3 PUI CONTACTS.</p>		
CSQ-29489	SO SOa		CSD-29494	QGA		CAU-29501	JT	
<p>CIRCUIT BREAKER THERMAL TRIP: SPST, NORMALLY CLOSED. CONTACTS RATED 80 AMPS, 26V DC ± 4V. THIS CIRCUIT BREAKER, ACTUATED BY A THERMOSTATIC DISC, AUTOMATICALLY RESETS ITSELF A SHORT TIME AFTER OPENING. IF AN OVERLOAD STILL EXISTS, THE BREAKER WILL AGAIN 3/9/45 KLIXON CATALOG MAR. 45 PLAS-80 SHEETS</p>			<p>RELAY: SPDT CONTACTS RATED 6 AMPS, 115V AC, 0.5 AMPS, AT 115V DC 2 #30A COILS IN SERIES 115V, 60 CYCLES, 3000 TURNS #35 WIRE, 182 OHMS DC RESISTANCE.</p>			<p>RELAY: CONSISTS OF 45,700 TURNS #39 EH WIRE OF 6500 OHMS DC RES. SPDT CONTACTS.</p>		
CSQ-29489			CG-29495	QCS QCR		CLR-29502	QCR-1	
<p>REOPEN. IF THE OVERLOAD CONDITION IS CORRECTED, BREAKER REMAIN CLOSED. STUD TYPE TERMINALS.</p>			<p>RELAY, TIME DELAY: CONTACTS RATED 10 AMPS, 220 VOLTS AC. COIL RATED 115V/60 CYCLES. 4200 TURNS OF .005" WIRE. DC RESISTANCE OF COIL 390 OHMS.</p>			<p>RELAY: 4PDT 1/4" SILVER CONTACTS RATED AT 6 AMPS., 115V AC. COIL RATED 115V, 60 CYCLES; 6VA; 550 TURNS OF #36E WIRE DC RESISTANCE -530 OHMS. COIL CURRENT 0.065 AMPS AT 60 CY. MYCALEX BASE MATERIAL.</p>		
CDS-29490	SO-7N/7N		CG-29495			CG-29503	SK-1M	
<p>RELAY: SPST DOUBLE BREAK CONTACTS. COIL RATED 12 VOLTS DC. COIL CONSISTS OF 46A TURNS #22E WIRE, DC RES. 1.82 TO 2.06 OHMS AT 77°F WITH A CURRENT DRAIN OF 2.9 TO 3.3 AMPS AT 6 VOLTS. CONTACTS WILL CARRY 80 AMPS AT 24 VOLTS. COIL HOUSED IN WATER-3/9/45 SS-4023 CSD:SS-023 MAR. 45 SS-102713</p>			<p>RELAY: SPST SINGLE BREAK, NORMALLY CLOSED. OPERATES AT 100, 115, AND 150 VOLTS AC.</p>			<p>CONTACTOR: SPDT, DOUBLE BREAK NORMALLY OPEN. CONTACTS TO CARRY 50 AMPS CONTINUOUSLY AT 115V, 60 CPS, AND TO BREAK 150 AMPS AT 115V, 60 CPS. BACK CONTACTS TO CARRY 35 AMPS CONTINUOUSLY AT 115V, 60 CPS OR 100 AMPS FOR 5 SEC EACH MINUTE. WILL BREAK 3/22/45 CR2792D115C4 P-7766611-1 APR. 45 REV 5</p>		
CDS-29490			CSD-29497	QGBa, QCQ-2		CG-29503		
<p>PROOF METAL CASE.</p>			<p>SENSITIVE RELAY: SPDT, SINGLE BREAK, NORMALLY CLOSED. OPERATE CONTINUOUSLY WITH MAX. LOAD OF 20 MA. RESISTANCE OF COIL 1400 TO 1800 OHMS.</p>			<p>34 AMPS, OPERATING COIL 10V DC, 8 WATTS. 1350 TURNS OF #0.0126" E WIRE 21 OHMS DC RES.</p>		
CAU-29491	QGA		CG-29497			CRY-29504	MARK 36	
<p>RELAY: 4PST, 3 MAKE AND ONE BREAK. CONTACTS RATED 18 VOLTS DC, 5 AMPS. SINGLE WOUND COIL RATED 18V DC, 9,800 TURNS OF ENAMEL COPPER WIRE, 6.9 MA, 350 OHMS DC RESISTANCE.</p>			<p>TRANSFER RELAY: 4PDT SINGLE BREAK, NORMALLY CLOSED. OPERATES AT 100, 115, AND 130 VOLTS AC.</p>			<p>RELAY: CONTACTS RATED 115V, 400 CPS; 1 N.O. RATED 2.5 AMPS, 1 N.C. RATED 0.1 AMP. COIL RATED 115V, 400 CPS. PLUG-IN TYPE, HERMETICALLY SEALED SMALL OCTAL TUBE BASE.</p>		
CAU-29491			CSD-29498	QGBa, QCQ-2		CRY-29504		
<p>3/10/45 CAU:PIECE# CBM:746-607 MAR. 45 AQA-H-87080-6 ALT 0 U</p>			<p>3/6/45 113XAX101 CRV:W-307933-38 MAR. 45</p>			<p>3/17/45 F-8058 CG:P-7767995-6 MAR. 45 REV 0</p>		
CAY-29492	QGA		CQE-29499	SS		CRY-29505	MARK 36	
<p>RELAY, SPECIAL KEYING: 4PDT, COIL DATA: RATED 100V DC ± 10%. .061 AMPS, 1800 OHMS DC RESISTANCE. INDUCTANCE 2.37 H AT 1000 CYCLES. CURRENT .037 AMPS TO MAKE .026 AMPS TO BREAK. WINDING -21,000 TURNS OF .0050EC WIRE. BREAK DOWN TEST -1400V DC (1000V AC) 3/10/45 G-1 7502646 CBM:746-365 MAR. 45</p>			<p>SOLENOID, PULL TYPE: RATED 115/1/60, 2.6 AMPS INITIAL CURRENT 0.435 AMPS SEALED CURRENT, MAX. STROKE IS 3/4". THE PULL AT MINIMUM VOLTAGE (103V) IS NOT LESS THAN 20 TO 24 OZ AT ANY PART OF PLUNGER STROKE. COIL CONSISTS OF 1700 TURNS OF #27GAE WIRE WITH 3/9/45 CW:KS-5970-L03 CW:KS-5970 FIG 1 MAR. 45 CGE:G-34943 ISS. 6</p>			<p>RELAY: 2 NORMALLY OPEN CONTACTS RATED 115V, 400 CPS, 0.1 AMP (EACH). COIL RATED 4.5-6.0 MA DC PICKUP, 3000-4500 OHMS DC RES. PLUG-IN TYPE, HERMETICALLY SEALED SMALL OCTAL TUBE BASE.</p>		

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CRY-29506 MARK 36
 RELAY:
 1 NORMALLY CLOSED CONTACT RATED 115V, 400 CPS, 0.1 AMP. COIL RATED 40-60 MA DC PICKUP, 300-500 OHMS DC RES. PLUG-IN TYPE, HERMETICALLY SEALED SMALL OCTAL TUBE BASE.
 3/17/45 C-8058 CG:P-7767995-3
 MAR. 45 REV 0

CRY-29507 MARK 36
 RELAY:
 4 PRS. SPDT CONTACTS, RATED 115V, 400 CPS, 0.1 AMP. COIL RATED 115V DC, 6500 OHMS RES, 18 MA DC MAX PICKUP, PLUG-IN TYPE, HERMETICALLY SEALED 20 PIN SOCKET BASE.
 3/17/45 D-8058 CG:P-7767995-4
 MAR. 45 REV 0

CRY-29508 MARK 36
 RELAY:
 1 NORMALLY OPEN CONTACT, 1 NORMALLY CLOSED, RATED 115V, 400 CPS, 0.1 AMP. COIL RATED 4.0-5.0 MA DC PICKUP, 5000-7000 OHMS DC RES. PLUG-IN TYPE, HERMETICALLY SEALED SMALL OCTAL TUBE BASE.
 3/17/45 B-8058 CG:P-7767995-2
 MAR. 45 REV 0

CRY-29509 MARK 36
 RELAY:
 2 PRS. SPDT CONTACTS RATED 250V DC, 0.01 AMP. COIL RATED 115V DC, 18 MA DC, 6500 OHMS DC RES MAX. PICKUP, PLUG-IN TYPE, HERMETICALLY SEALED SMALL OCTAL TUBE BASE.
 3/17/45 E-8058 CG:P-7767995-5
 MAR. 45 REV 0

CG-29510 SK-1M
 RELAY:
 CONTAINS ONE SPDT SWITCHETTE RATED 10 AMPS, 125V AC, OPERATED BY A BIMETALLIC WISHBONE HEATED ON ONE SIDE BY A METALLIC HEATER, WITH HEATER ENERGIZED AT 5.5 V RELAY WILL NOT ENERGIZE SWITCHETTE IN AIR STREAM OF 600 FT PER MIN. BUT WHEN
 3/22/45 CR-2791J1048 CG:K-7898842-1
 APR. 45 REV. 2

CG-29510
 AIR STREAM IS BLOCKED OFF RELAY SHALL OPERATE WITHIN 30 SECONDS.

CCX-29511 SK-1M
 RELAY:
 TIME DELAY, SYNC. MOTOR DRIVEN WITH CLUTCH, OPERATING VOLTAGE 115V, 50/60 CPS. SPDT CONTACTS RATED 20 AMPS MAX AT 110V, 60 CPS. TIMING RANGE 1 1/2 SEC TO 30 SEC.
 3/22/45 TD1C-30S CG:P-7766346-2
 APR. 45 REV 5

CCX-29512 SK-1M
 RELAY:
 TIME DELAY, SYNC. MOTOR DRIVEN WITH CLUTCH, OPERATING VOLTAGE 115V, 50/60 CPS. SPDT CONTACTS RATED 20 AMPS MAX AT 110V, 60 CPS. TIMING RANGES 6 SEC TO 120 SEC.
 3/23/45 TD1C-2M CG:P-7766346-4
 APR. 45 REV 5

29513 TCZ
 RELAY CONTROL:
 3PDT NORMALLY CLOSED CONTACTS RATED 15 AMPS, 28V DC CONTINUOUS NON-INDUCTIVE LOAD. COIL RATED 28V DC NOMINAL, 32V DC
 CGCE:53177 CA5X:430F CGX:27D12957-1
 *COL-405220110/REV D9482. COL SPEC C-405
 COL-405001200/D10475 COL-405000900/D9444
 3/27/45 GSEE ABOVE *SEE ABOVE
 APR. 45

-29513
 MAX. 18V DC MIN. 150 OHMS ±10% DC RESISTANCE. TEMP RISE: MAX ABOVE 55°C AT MAX. COIL VOLTAGE 45°C. WILL OPERATE AT ALTITUDE OF 50,000 FT.

CGE-29514 TCZ-1
 RELAY, KEYING:
 CONSISTS OF 3SPST NORMALLY OPEN LEAF TYPE CONTACTS, 1 SPST NORMALLY CLOSED LEAF TYPE CONTACT, 2 SPDT LEAF TYPE CONTACTS AND 1SPDT VACUUM TYPE CONTACT.
 *COL-410191000/RD8590 410000800/D10812
 COL SPEC C-405
 3/28/45 G-32877 *SEE ABOVE
 APR. 45 G-32877A

CGE-29514
 COIL VOLTAGE 28V DC MAX, 22V DC MIN. TOTAL DC RES. OF 2 COILS 60 OHMS +10%-5%. INCLUDES A 28V DC VACUUM SWITCH TYPE -24163.

CSD-29514-A TCZ-1
 RELAY, KEYING:
 CONSISTS OF 3 SPST NORMALLY OPEN LEAF TYPE CONTACTS, 1 SPST NORMALLY CLOSED LEAF TYPE CONTACT, 2 SPDT LEAF TYPE CONTACTS AND 1 SPDT VACUUM TYPE CONTACT.
 COIL VOLTAGE 28V DC MAX, 22V DC MIN.
 *COL-410001100/D10813 COL SPEC C405
 3/28/45 *SEE ABOVE
 APR. 45

CSD-29514-A
 TOTAL DC RES. OF 2 COILS 60 OHMS +10%-5% INCLUDES 28V DC VACUUM SWITCH -24163. SAME AS -29514 EXCEPT FOR ARRANGEMENT OF TERMINALS.

-29515 TCZ-1
 RELAY, CONTROL:
 2PDT WITH ONE POLE NORMALLY OPEN AUXILIARY. COIL VOLTAGE: 28V DC NOMINAL, 32V DC MAX. 18V DC MIN. 125 OHMS ±10% DC
 CGCE:G-32311 G-32311A CA0X:R-22A
 *COL-410170000/D11051 410001500/REV. 2
 COL SPEC C-405 COL-410001200/D10642
 3/28/45 GSEE ABOVE *SEE ABOVE
 APR. 45

-29515
 RES. MAIN CONTACTS RATED 12 AMPS, 28V DC CONTINUOUS NON-INDUCTIVE LOAD. AUXILIARY - 8 AMPS, 28V DC CONTINUOUS NON-INDUCTIVE LOAD.

CGE-29516 TCZ, TCZ-1
 RELAY, CONTROL:
 2PDT CONTACTS RATED 12 AMPS, 28V DC CONTINUOUS NON-INDUCTIVE LOAD. COIL VOLTAGE: 28V DC NOMINAL, 32V DC MAX., 18V DC MIN DC RESISTANCE-125 OHMS ±10%.
 *COL-410001400/D11052 410160000/REV D11050 COLSPEC C-405
 3/28/45 CGE:G-32734 COL-410001300/
 APR. 45 CAUX:K228 D11047 *

CGE-29516
 WILL WITHSTAND 50 HR. SALT SPRAY TEST.

CATH-29517 DAQ
 RELAY:
 DPDT COIL RATED 6V AC, 50-60 CYCLES, RESISTANCE IS 1 OHM ±10% TOL. CONTACTS RATED 30 AMPS 50-60 CYCLES.
 3/28/45 1000 CFT:NCP-28-2
 APR. 45 ISS. H

CGE-29518 TCZ
 RELAY, CONTROL:
 CONSISTS OF 1SPDT, AND 1SPST NORMALLY CLOSED AND 1 AUXILIARY SPST NORMALLY CLOSED. CONTACTS AUXILIARY CONTINUOUS, NON-INDUCTIVE LOAD 2 AMPS 28V DC. COIL RATED 28V DC MAX, 22V DC MIN DC RESIST-
 *COL-410180000/REV08223 COL SPEC C-405
 3/29/45 G-33304 *SEE ABOVE
 APR. 45

CGE-29518
 ANCE 125 OHMS +5%-10%. OPERATES AT ALTITUDE OF 50,000 FEET.

CGE-29519 TCZ-1
 RELAY SHORTING:
 CONSISTS OF 1 SPST, NORMALLY CLOSED HIGH VOLTAGE TYPE CONTACT 1 SPDT HIGH VOLTAGE TYPE, ONE NORMALLY OPEN SNAP SWITCH COIL RATED 30V DC MAX, 22V DC MIN., 26.5 V DC NOMINAL. TWO COILS EACH 30 OHMS. TOTAL DC RES. 60 OHMS +10%-5%. CONTACT
 3/29/45 G-36427 COL-410001000
 APR. 45 D11055

CGE-29519
 PRESSURE 55 GRAMS MIN OVERTRAVEL 0.015" MIN. TO WITHSTAND A 50 HR SALT SPRAY TEST.

CGE-29520 TCZ SERIES
 RELAY KEYING:
 SPDT CONTACT. USES VACUUM CONTACTOR TYPE -24163 COIL RATED 28V DC NOMINAL 32V DC MAX, 18V DC MIN. DOUBLE COIL WITH TOTAL DC RES 60 OHMS ±10% WOUND WITH #29 CHROME OXIDE INSULATED WIRE. WILL WITHSTAND 48 HR SALT SPRAY TEST.
 3/29/45 G-32881 COL-410210000
 APR. 45 REV. 1

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
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CAOX- 29521 TCZ-1
 RELAY:
 3 PST, NORMALLY OPEN. CONTACTS 3/16" DIAM. FINE SILVER OR EQUIVALENT SHALL MAKE OR BREAK 1200 WATTS @ 115V AC INDUCTIVE LOAD. COIL RATED 115V AC NOMINAL 132V AC MAX. 97V AC MIN DC RES 320 OHMS ±10%. TO WITHSTAND 100 HR SALT SPRAY TEST
 3/29/45 R-30F COL-405001700
 APR. 45 REV. 0

CGX- 29526 TCZ
 RELAY, KEYING:
 DPDT CONTACTS 1/4" DIAMETER FINE SILVER. COIL RATED 115V DC NOMINAL. DC RESISTANCE 2274 OHMS. MUST STAY IN NORMAL OR OPERATE POSITION AND OPERATE DURING AN 8 G VIBRATION TEST.
 3/29/45 JD115RR COL-405220800
 APR. 45 CAT #12706 REV. 1

CGE- 29533 TCZ
 RELAY:
 3P NORMALLY OPEN. CONTACTS 1/4" DIAMETER FINE SILVER 1200 WATTS AT 115V AC. COIL RATED 115V DC NOMINAL. DC RESISTANCE -4250 TEST OHMS. MUST STAY IN NORMAL OR OPERATE POSITION AND OPERATE DURING AN 8 G VIBRATION TEST.
 3/29/45 G33549 COL-405220310
 APR. 45 REV 2

CGE- 29522 TCZ SERIES
 RELAY:
 THREE POLE, NORMALLY OPEN. CONTACTS 1200 WATTS AT 115V AC INDUCTIVE LOAD 3/16" DIAMETER FINE SILVER CONTACTS. COIL RATED 115V AC 60 CPS. DC RES 500 OHMS. ± 20 OHMS WOUND WITH VARNISH
 *COL-405220410/D7807 COL SPEC C-405
 3/29/45 G-33596 *SEE ABOVE
 APR. 45

CCX- 29527 TCZ
 RELAY TIME DELAY:
 SYNCHRONOUS MOTOR DRIVEN TIME DELAY SWITCH HAVING MAGNETIC RELEASE AND SPRING RETURN ISP NORMALLY OPEN CIRCUIT RATED 10 AMPS. 115V AC. RESET TIME 0.8 SEC MAX 30 SEC MAX DELAY ADJUSTABLE 1 TO 30 SEC.
 3/29/45 TD2/30S COL:402180000
 JUN. 45 REV. 1

CEE- 29534 AN/UPA-4
 RELAY. THERMAL TIME DELAY:
 SPST NORMALLY OPEN, CONTACTS RATED AT 4 AMPS 115V, 60 CYCLES, 115V AC HEATER SEALED IN GLASS WITH MEDIUM 4 PRONG BASE.
 3/29/45
 APR. 45

CGE- 29522
 BAKED ENAMELED WIRE.

CSI- 29528 AN/UPA-4
 RELAY:
 SPDT HERMETICALLY SEALED. CONSISTS OF 2 DC COILS IN SERIES EACH 24,500 TURNS #42 WIRE 8000 OHMS DC RES. TOTAL ADJUSTED TO CLOSE AT 2.0-2.5 MA. CONTACTS RATED 0.25A. @ 6.3V AC TO WITHSTAND 10 G VIBRATION.
 3/29/45 5RHLPX8000
 APR. 45

CAY- 29535 TBW
 RELAY, KEYING:
 6 PDT, 2 BREAKS PER CIRCUIT. COIL RATED 11 TO 15V DC 1.43 TO 1.95 MAX. INTERMITTENT. 1760 TURNS #22 WIRE. DC RESISTANCE 7.7 OHMS ±10%.
 3/30/45
 APR. 45 CAY:T-7608408
 REV. 7

CAOX- 29523 TCZ-1
 RELAY:
 DOUBLE POLE, NORMALLY OPEN. CONTACTS 1/4" DIAMETER FINE SILVER. COIL VOLTAGE 12V DC NOMINAL 14V DC MAX. 7.2V DC MIN DC RESISTANCE -187 OHMS ±10%. SHALL WITHSTAND MECHANICAL FREQUENCY IN ANY PLANE 10-57 CPS 0.03" AMPLITUDE. SHALL WITHSTAND 100 HR SALT SPRAY TEST.
 3/29/45 R-30 COL-405001300
 APR. 45 REV. 0

CGX- 29529 TCZ
 RELAY, CONTROL:
 DOUBLE POLE, NORMALLY OPEN. CONTACTS 1/4" DIAMETER FASALOY. COIL RATED 115V AC. 60 CPS. DC RESISTANCE 1000 OHMS. MUST STAY IN NORMAL POSITION AND OPERATE DURING AN 8 G VIBRATION TEST.
 3/29/45 JA115AA COL-405220700
 APR. 45 CAT#12709 REV 1

CSO- 29536 SF,SF-1
 RELAY:
 DPDT, 115V DC, 4 AMPS. CONTACTS RATED 30 AMPS. 115V AC 4 AMPS 115V DC INT. 30 AMPS 230V AC, 2 AMPS 230V DC INT. 8 TERMINALS FRONT CONNECTED. COIL RATED 115V DC & AC/60 CYCLES. 0.140 AMP WITH ARMATURE OPEN, .080 AMPS ARMATURE CLOSED
 3/31/45 84X8X CATALOG
 APR. 45

CAOX- 29523
 STAND A 100 HR SALT SPRAY TEST.

CAOX- 29530 TCZ-1
 RELAY, CONTROL:
 DPST NORMALLY OPEN. CONTACTS 1/4" DIAMETER FASALOY. COIL RATED 115V AC, 60 CPS NOMINAL 132V AC 60 CPS MAX. 97V AC 60 CPS MIN. DC RESISTANCE 1100 VOLTS ±10%. TO WITHSTAND 100 HR SALT SPRAY TEST.
 3/29/45 R39E COL-405001800
 APR. 45 REV 0

CSO- 29536
 DC RES. 180 OHMS 4200 TURNS #32 COPPER WIRE.

CGE- 29524 TCZ
 RELAY:
 DOUBLE POLE, NORMALLY OPEN. CONTACTS 3/16" DIAMETER FINE SILVER. COIL RATED 7.2 TO 14V DC RESISTANCE APPROX 187 OHMS. WOUND WITH ENAMELED WIRE VARNISH BAKED. MUST STAY IN A NORMAL OR OPERATE POSITION AND OPERATE DURING A 10G VIBRATION TEST.
 3/29/45 G 33402 COL-405220510
 APR. 45 REV. 1

CAOX-29531 TCZ-1
 RELAY, CONTROL:
 TWO POLE, NORMALLY OPEN. CONTACTS 1/4" DIAMETER FASALOY. COIL RATED 28V DC NOMINAL. 31V DC MAX. 25V DC MIN. DC RESISTANCE 230 OHMS ±10%. TO WITHSTAND MECHANICAL FREQUENCIES IN ANY PLANE 10-55 CPS. 0.03" AMPLITUDE. TO WITHSTAND 100 HR SALT SPRAY TEST.
 3/29/45 R-39D COL-405001400
 APR. 45 REV 0

CATM- 29537 SU, SU-1
 RELAY, MIDGET:
 DPST, NORMALLY OPEN. CONTACTS RATED 10 AMPS AT 110V AC (NON-INDUCTIVE), 1/4" IN SIZE. COIL RATED 24V DC, .085 AMPS, 4300 TURNS #34 PE WIRE; DC RESISTANCE -280 OHMS.
 4/2/45 9658 CATM SHEET
 APR. 45 9658

CGE- 29524
 TION TEST.

CAOX- 29531
 100 HR SALT SPRAY TEST.

CAE- 29538 SO-4
 CONTACTOR:
 4PST, ONE NORMALLY OPEN INTERLOCKS CIRCUIT. CONTACTS RATED 25 AMPS, 115 VOLTS. COIL RATED 115V, 60 CYCLES. CONTINUOUS DUTY. INSIDE WINDING -950 TURNS #25 HE WIRE, 14.3 OHMS DC RESISTANCE. OUTSIDE WINDING -500 TURNS #24 HE WIRE 6.7 OHMS
 4/2/45 N619 CRP-71-5037
 APR. 45 COIL:39-1120-11

CAOX- 29525 TCZ-1
 RELAY, CONTROL:
 DPDT CONTACTS 1/4" DIAMETER FINE SILVER. COIL RATED 115V DC NOMINAL, 127V DC MAX 99V DC MIN. DC RESISTANCE 8000 OHMS. SHALL WITHSTAND 100 HR SALT SPRAY TEST.
 3/29/45 R-39D COL-405001500
 APR. 45 D11196

CGX- 29532 TCZ
 RELAY, CONTROL:
 TWO POLE, NORMALLY OPEN. CONTACTS 1/4" DIAMETER FASALOY. COIL RATED 28V DC. DC RESISTANCE 186 OHMS. MUST STAY IN NORMAL OR OPERATE POSITION AND OPERATE DURING AN 8 G VIBRATION TEST.
 3/29/45 JD28AA COL-405220600
 APR. 45 CAT NO. 12708 REV 2

CAE- 29538
 DC RES TOTAL -1450 TURNS, 21 OHMS DC RES.

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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CSD- 29539	WCA-2		CSD- 29545	WFA		CCQ- 29551				
RELAY: SPDT CONTACTS RATED 1 AMP. 115V DC. .5 AMPS 115V DC INT. 3 AMPS. 220V AC 6 AMPS 110V AC, SILVER CONTACTS. COIL RATED 115V 60 CYCLES 5000 TURNS #38 WIRE 60S OHMS DC RESISTANCE MAX RATING ARMATURE OPEN 92 MA. MIN RATING ARMATURE CLOSED 4/3/45 1XAX CBM:746-337 APR. 45 COIL:MK 50A ALT 1			RELAY: DPST SILVER CONTACTS RATED 6 AMPS 115V AC. 1 AMP 115V DC. 3 AMP 230V DC. TWO COILS: RATED 2 WATTS. 100V DC; 10,000 TURNS #42 WIRE DC RESISTANCE -2910 OHMS. PHENOLIC INSULATION. 4/6/45 51AXA CBM-746-640 APR. 45 COILS:#100A ALT 1			OHMS DC RESISTANCE.				
54 MA.		CSD- 29539	CATH-29546	WFA		CCQ- 29552	WFA			
			RELAY: 3PDT NORMALLY OPEN SILVER PLATED CONTACTS RATED 10 AMPS AT 110V AC NON-INDUCTIVE LOAD. COIL RATED 90-115V. 60 CYCLES; 5000 TURNS #35E WIRE; .07 AMPS; 425 OHMS DC RESISTANCE. MAX RATING ARMATURE OPEN 84 MA. MIN RATING ARMATURE CLOSED 65 MA. 4/6/45 SA-3000-33XR88 CBM-746-603 APR. 45 COIL:#68A ALT 1			RELAY: SPST NORMALLY OPEN SILVER PLATED CONTACTS RATED 2 AMPS AT 32V DC. 2 AMPS AT 125V AC. NON-INDUCTIVE LOAD. COIL RATED 28V DC; 6000 TURNS #39 WIRE; 600 OHMS DC RESISTANCE MAX. 4/6/45 TSU-A-600 CBM-746-542 APR. 45 ALT 0				
		CATH-29540	SU.SU-1			CATH- 29553	WFA			
		RELAY: DPDT SILVER PLATED CONTACTS RATED 10 AMPS AT 110V AC; NON-INDUCTIVE LOAD. COIL RATED 90 TO 115 VOLTS. 60 CPS. 0.07 AMPS 5000 TURNS #35 PE WIRE. 425 OHMS DC RESISTANCE. SAME AS -29474 BUT DOES NOT HAVE ANY BRACKETS. 4/4/45 SA-3000X CATH-SA3000X APR. 45 COIL:#68A			RELAY: DPDT WITH SPST KEYING CONTACT NORMALLY OPEN. SILVER PLATED CONTACTS RATED 10 AMPS AT 115V AC. NON-INDUCTIVE LOAD. COIL RATED 100V DC 1600 TURNS #40E 4200 OHMS DC RESISTANCE. MAX RATING ARMATURE OPEN 27 MA. MIN RATING ARMA- 4/6/45 400-18 CBM-746-224 APR. 45 ALT 0			RELAY: DPDT SILVER CONTACTS RATED AT 200 WATTS. NON-INDUCTIVE AC LOAD. COIL TO OPERATE AT 10 MA WITH BRIDGE TYPE MOUNTING BRACKET WITH ARMATURE SPRING ADJUSTMENT. #43 WIRE. 7500 OHMS DC RESISTANCE. TO WITHSTAND 200 HR SALT SPRAY TEST. 4/6/45 SA1604XX CBM-746-620 APR. 45 ALT 1		
		CATH- 29541	NMC-1			CATH- 29554	WFA			
		RELAY: DPDT SILVER PLATED CONTACTS RATED 10 AMPS AT 115V AC. NON-INDUCTIVE LOAD. COIL RATED 90 TO 115 VOLTS 60 CPS. 0.07 AMPS 5000 TURNS #35E WIRE; 425 OHMS DC RESISTANCE ±10%. SIMILAR TO -29474 EXCEPT FOR PLACEMENT OF BRACKETS. 4/4/45 SA-3000XR88 CATH-746-505 APR. 45 COIL #68A			TURE CLOSED 22 MA.			RELAY: 3 POT CONTACTS RATED 10 AMPS 110V AC COIL RATED 90V DC. 4200 OHMS DC RESISTANCE. SILVER CONTACTS. ALL OTHER METAL PARTS TO WITHSTAND 200 HR SALT SPRAY TEST. 4/6/45 SA2000-38XR88 CBM-746-573 APR. 45 ALT 0		
		CATH- 29542	WCA-2			CDD- 29555	SO-4			
		RELAY: DPST. SINGLE BREAK. NORMALLY OPEN. 3/8" SILVER PLATED CONTACTS RATED 3.2 AMPS 110V DC. 10 AMPS. 220V AC 60 CYCLES. 20 AMPS 110V AC 60 CYCLES. COIL RATED 90 TO 115 VOLTS. 60 CPS 0.07 AMPS. 5000 TURNS #35E WIRE. 425 OHMS DC RESISTANCE ±10%. 4/4/45 455C CATH-455-C APR. 45 COIL:#68A CBM:746-319 ALT 1			RELAY: DPDT SILVER PLATED CONTACTS RATED 10 AMPS. 115V AC. NON-INDUCTIVE LOAD. COIL RATED 100V DC. 1600 TURNS #40 PE WIRE; 4200 OHMS DC RESISTANCE. MAX. 4/6/45 SA-2000XR88 CBM-746-600 APR. 45 COIL:#73SDC ALT 0			RELAY: SPST. NORMALLY CLOSED. CONTACTS RATED 1.5 AMPS AT 115V DC CONTINUOUS DUTY. AMBIENT TEMPERATURE 50°C. COIL: 0.32 AMPS TO 0.67 AMPS. 2420 TURNS #20E WIRE. 15 OHMS DC RESISTANCE. 4/9/45 E10930-06-500 CDD:EK-11210 APR. 45 COIL:CRY-246		
		CATH- 29542	LAMINATED BAKELITE BASE.			CDD- 29556	SO-4			
		RELAY: 4 POT SILVER PLATED CONTACTS RATED 10 AMPS. AT 115V AC. COIL RATED 100V DC; 1600 TURNS #40 PE WIRE; 4200 OHMS DC. RESISTANCE; NON-INDUCTIVE LOAD. 4/6/45 98138 CBM-746-601 APR. 45 COIL:#73SDC ALT 1			RELAY: DPDT PURE SILVER CONTACTS RATED 10 AMPS AT 110 VOLTS AC. NON-INDUCTIVE LOAD. COIL RATED 110 VOLTS; 1800 TURNS #41E WIRE; 6000 OHMS ±10% DC RESISTANCE. 4/6/45 SA2000 CBM-746-565 APR. 45 COIL:TYPE JC ALT 0			CONTACTOR: 4 PST. 3 NORMALLY OPEN AND 1 NORMALLY CLOSED CONTACTS. CONTACTS RATED 50 AMPS. CONTINUOUS DUTY. AMBIENT TEMPERATURE 50°C. COIL RATED 57.5 VOLTS. 7030 TURNS #27E WIRE. 195 OHMS DC RESISTANCE. 4/9/45 E3562-08-502 CDD:EK-11209 APR. 45 COIL:CRY-259		
		CRY- 29543	QGB			CDD- 29557	SO-4			
		RELAY: DPDT. NORMALLY CLOSED. CONTACTS RATED 3 AMPS 115V AC. COIL RATED 110V AC; 4000 TURNS #34 FORMEX COVERED WIRE. 170 OHMS DC RESISTANCE. PLUS-IN TYPE WITH OCTAL BASE FOR VERTICAL MOUNTING. 4/4/45 GAC A14851 CRY:RP1731 APR. 45			RELAY: TWO UNITS WITH MECHANICAL INTERLOCK TO PERMIT INDEPENDENT ACTION OF EACH UNIT BUT PREVENTING SIMULTANEOUS OPERATION. EACH UNIT -DPDT SILVER CONTACTS RATED 5 AMPS 110V AC NON-INDUCTIVE LOAD. COIL RATED 82V DC 16000 TURNS #42 WIRE. 4000 4/6/45 BJUI2942 CBM-746-541 APR. 45 MODIFIED ALT 0			CONTACTOR: 3 PST. 2 NORMALLY OPEN AND 1 NORMALLY CLOSED CONTACTS. CONTACTS RATED 50 AMPS. CONTINUOUS DUTY. AMBIENT TEMPERATURE 50°C. COIL RATED 57.5 VOLTS. 7030 TURNS #27E WIRE. 195 OHMS DC RESISTANCE. 4/10/45 E3562-08-501 CDD:EK-11209 APR. 45 COIL:CRY-259		
		CEE- 29544	WFA			CHP- 29558	BT			
		RELAY. TIME DELAY: SPST. SB NORMALLY OPEN. CONTACTS RATED 115V AC/DC. 2 AMPS MAX. INDUCTIVE. HEATER RATED 115V AC/DC. 3-9 WATTS. NON-INDUCTIVE. TIME TOLERANCE 40-50 SEC. HERMETICALLY SEALED. GLASS ENVELOPE. 4-PRONG MEDIUM BASE. 4/6/45 B-1513 CBM-746-610 APR. 45 ALT 1			RELAY: TWO UNITS WITH MECHANICAL INTERLOCK TO PERMIT INDEPENDENT ACTION OF EACH UNIT BUT PREVENTING SIMULTANEOUS OPERATION. EACH UNIT -DPDT SILVER CONTACTS RATED 5 AMPS 110V AC NON-INDUCTIVE LOAD. COIL RATED 82V DC 16000 TURNS #42 WIRE. 4000 4/6/45 BJUI2942 CBM-746-541 APR. 45 MODIFIED ALT 0			RELAY. TIME DELAY: CONSISTS OF A SMALL INDUCTION MOTOR AND A MICROSWITCH. THE 5 RPM MOTOR OPERATES ON 115/1/60 TO GIVE AN ADJUSTABLE DELAY OF 1 TO 10 SECS ON THE MICROSWITCH. THE LATTER IS A SPDT SWITCH WITH CONTACTS RATED 10 AMPS AT 125V 5 AMPS AT 250V 4/10/45 1817 CQJ:SKETCH APR. 45		

Class 29—Electromagnetic Contact Devices

3.29-33

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
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CHP- 29558
3 AMPS AT 460V 2 AMPS AT 600V.

CAV-29563
(CARRY) -150 WATTS (MAX 3 AMPS). COIL DATA: 21,300 TURNS #39SSC WIRE, 3000 OHMS DC RES. NOM. OPER. 3.5 MA OPERATE 7.5 MA.

CBZ- 29571 TDP
RELAY:
COIL 110 VOLTS, 50 CYCLES PUSH AND PULL. OPERATES CONDENSER SHORTING MECHANISM. ALL HARDWARE CADMIUM PLATED.

4/19/45 860 Y-5116-D
APR. 45 REV. 0

GGE- 29559 TCS
RELAY, MIDGET:
SPDT WITH A COUNTER BALANCED ARMATURE. CONTACTS 1/16" -1C SILVER. COIL RATED 12V DC NOMINAL, 8.5V DC MINIMUM, OR UN-FILTERED RECTIFIED 60 CPS AC APPROXIMATE SINE WAVE FORM WITHOUT BUZZING DC RES. 52 OHMS. TO WITHSTAND 200 HR NAVY SALT
4/12/45 G-35680 COL-410122000
APR. 45 REV 09163

CLR- 29564 TBS-8
RELAY:
SPST, NORMALLY CLOSED, CONTACT RATINGS: 2 AMPS, 500 VOLTS AC OR 1 AMP AT 400V DC (MAIN POLE). AUXILIARY CONTACT RATED 250 MA AT 250V AC. COIL DATA: NOMINAL TRIPPING CURRENT 140 MA DC, 1700 TURNS #30E WIRE, 43 OHMS ±5% DC RESISTANCE.
4/13/45 1040-R CRV:K-860214P1
APR. 45 REV. 4

CBZ- 29572 TDP
RELAY:
1 POLE NORMALLY OPEN, 1 POLE NORMALLY CLOSED, OPEN TYPE. SILVER PLATED CONTACTS 10 AMPS. COIL RATED 110 VOLTS, 50 CYCLES INDEPENDENTLY CONNECTED ALL HARDWARE EXCEPT CONTACTS, CADMIUM PLATED.
4/19/45 700 Y-5536-D
APR. 45 REV 0

CGE- 29559
SPRAY TEST.

CBZ- 29565 TDP
RELAY:
4 POLE, NORMALLY OPEN; 1 POLE NORMALLY CLOSED. SILVER PLATED CONTACTS 25 AMPS. COIL RATED 110 VOLTS, 50 CYCLES INDEPENDENTLY CONNECTED. ALL HARDWARE EXCEPT CONTACTS CADMIUM PLATED.

CBZ- 29573 TDP
RELAY:
2 POLES, NORMALLY OPEN, 1 POLE NORMALLY CLOSED, OPEN TYPE. SILVER PLATED CONTACTS. 15 AMPS. COIL RATED 110 VOLTS 50 CYCLES, INDEPENDENTLY CONNECTED. ALL HARDWARE EXCEPT CONTACTS CADMIUM PLATED.

4/18/45 702-1 Y-5231-D
APR. 45 REV 0

4/19/45 702-0 Y-3297-D
APR. 45 REV 0

CGE- 29560 TCS
CONTACTOR, SOLENOID:
SP, NORMALLY OPEN, CONTACTS 7/16" DIAM., 100 AMPS, CONT., 400 AMPS, SURGE. COIL RATED 12V DC CONTINUOUS DUTY DC. RES. 20 OHMS CONT.

CBZ- 29566 TDP
RELAY TIME DELAY:
SPST NORMALLY OPEN, OPEN TYPE TIME DELAY. SILVER PLATED CONTACTS. COIL RATED 110 VOLTS, 50 CYCLES, TIME DELAY 60 SECONDS. INDEPENDENTLY CONNECTED REQUIRES OIL IN DASHPOT. ALL HARDWARE EXCEPT CONTACTS CADMIUM PLATED.
4/18/45 811 Y-5251-D
APR. 45 REV 0

CBZ- 29574 TDP
RELAY:
INSTANTANEOUS RESET SPST NORMALLY CLOSED 2 WIRE CONTROL, OPEN TYPE MARKED "NO OIL" ON DASHPOT. ALL HARDWARE EXCEPT CONTACTS CADMIUM PLATED. MAX. CURRENT RATING IS 600 MA AT 600 VOLTS MAX.
4/19/45 810 Y-2180-D
APR. 45 REV 0

4/12/45 SC#2 COL-401780000
APR. 45 G-31203 REV D4829

CKU- 29561 TBS-8
RELAY:
SPST NORMALLY OPEN, CONTACTS RATED 3 AMPS, 110V, 60 CYCLES NON-INDUCTIVE LOAD. COIL TO OPERATE ON 5 MA AT 10V DC; 15,200 TURNS #38 WIRE; APPROX 1950 OHMS DC RES. BAKELITE BASE.

CBZ- 29567 TDP
RELAY, TIME DELAY:
SPST NORMALLY OPEN, OPEN TYPE TIME DELAY. SILVER PLATED CONTACTS. COIL RATED 110 VOLTS, 50 CYCLES, TIME DELAY 2 MINUTES. BI-PASS DASHPOT, INDEPENDENTLY CONNECTED ALL HARDWARE EXCEPT CONTACTS CADMIUM PLATED.
4/18/45 811 Y-6502-D
APR. 45 REV 0

CAY- 29575 TDP
RELAY, TIME DELAY:
CONSISTS OF SILVER CONTACTS WHICH WILL CARRY 5 AMPS AT 125 VOLTS AC OR DC, AND A SELF STARTING SYNCHRONOUS MOTOR 110/1/60. HIGH CONTACT PRESSURE ASSURED BY THE LOCKED MOTOR TORQUE OF THE MOTOR. THE CONTACTS CLOSE AFTER A PREDETERMINED
4/19/45 TD STYLE CATALOG
APR. 45 N-63 5468 41-365

4/12/45 2230558 CRV:K-843567P2
APR. 45 REV 7

CAU- 29562 TBS-8
RELAY:
3PST NORMALLY CLOSED, CONTACT RATINGS: RECOMMENDED LOAD LIMITS (BREAK OR MAKE) 135 WATTS (MAX 3 AMPS) RECOMMENDED LOAD LIMITS (CARRY) 150 WATTS (MAX 3 AMPS). *CRV:P-713837 G530 REV 17 CRV:M-415604 P17 REV 10
4/12/45 AQA *SEE ABOVE
APR. 45 COIL:D-282282

CSD- 29568 QCS
RELAY:
4PST NORMALLY OPEN, CONTACTS RATED 30 AMPS 115V AC 4 AMPS 115V DC 30 AMPS 230 V AC, 0.75 AMPS 230V DC. COIL RATED 75V DC; 1600 OHMS DC RESISTANCE; 12,000 TURNS #37 WIRE. *CBM-746-58 ALT 1(FOR DIMENSIONS)
4/18/45 80XX *SEE ABOVE
APR. 45 COIL: "X"

CAY- 29575
TIME DELAY AND WILL REMAIN CLOSED AS LONG AS MOTOR IS ENERGIZED.

CAV-29562
COIL DATA: 21300 TURNS #39 SSC WIRE. 3000 OHMS DC RES NOM. OPER. 3.5 MA, OPERATE 7.5 MA.

CSD- 29569 QCR-1
RELAY:
1SPST NORMALLY OPEN, AND 1 SPDT, CONTACTS RATED 30 AMPS AT 115V AC. COIL RATED 115 VOLTS, 60 CYCLES; 4200 TURNS #32 WIRE; 180 OHMS DC RESISTANCE. BAKELITE INSULATION.
4/18/45 8AAX101 CBM-746-145
APR. 45 COIL:D

CSD- 29576 SF
RELAY MIDGET
DPST, SINGLE BREAK, NORMALLY OPEN, FRONT CONTACT - CONTACT CLOSED WHEN COIL IS ENERGIZED. CONTACT RATINGS: 6 AMPS, 115V AC, 0.5 AMPS, 115V DC., 3 AMPS, 230V AC. COIL RATED 115 VOLTS, 0.028 AMPS., 8500 TURNS #41 WIRE, 4150 OHMS DC RESISTANCE
4/19/45 MIDGET TYPE CBM:C-59
MAY 45 1 BXX COIL:85A TYPE 746-235

CAU- 29563 TBS-8
RELAY, KEYING:
DPST, ONE NORMALLY OPEN AND ONE NORMALLY CLOSED, CONTACT RATINGS: RECOMMENDED LOAD LIMITS (BREAK OR MAKE) -135 WATTS (MAX 3 AMPS). RECOMMENDED LOAD LIMITS *CRV:P-713837 G528 REV 17 CRV:M-415604 P 17 REV 10.
4/13/45 AQA *SEE ABOVE
APR. 45 COIL:D282282

CBZ- 29570 TDP
RELAY:
3 POLES NORMALLY OPEN, OPEN TYPE, SILVER PLATED CONTACTS RATED 25 AMPS. COIL RATED 110 VOLTS 50 CYCLES, THERMAL OVERLOADS 5.2 AMPS FOR 2 MOTORS. EACH MOTOR RATED 110/1/50-60, 1/4 HP. ALL HARDWARE EXCEPT CONTACTS CADMIUM PLATED.
4/19/45 709 CATALOG 810,
APR. 45 815

CSD- 29576
INCLUDING 2000 OHM RESISTOR IN SERIES WITH COIL.

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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RESTRICTED

NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CSD-29577	QCS-1	RELAY, MIDGET SINGLE POLE, SINGLE BREAK, NORMALLY CLOSED - CONTACTS RATED 8 AMPS, 115V AC, 3 AMPS, 230V AC, 0.5 AMPS, 115V DC. COIL RATED 115 VOLTS, 2037 OHMS IMPEDANCE, 5000 TURNS #38 WIRE, 605 OHMS *CBM:PART 746-241 4/19/45 MIDGET TYPE CBM:748-241 MAY 45 1XXA COIL: "50A" ALT 0 *	CRY-29584	TDQ	RELAY 3 PST NORMALLY OPEN, CONTACTS RATED 3 AMPS, 115V AC NON-INDUCTIVE. COIL DATA: 28,600 TURNS #38 C WIRE, 220V DC MAX. 3000 OHMS DC RESISTANCE, MOUNTING BRACKET, RELAY TO CLOSE AT LESS THAN 6.5 MA, AND OPEN BETWEEN 2.5 AND 3.5 MA-4/23/45 TYPE "G" CRY:K-881727 P1 MAY 45 CAT. #A-13763 REV 2	CBZ-29589		TROPICALLY IMPREGNATED COIL.
CSD-29578	NJ-3	RELAY DPST SB NORMALLY OPEN, SILVER PLATED CONTACTS RATED 30 AMPS, 115V AC, 4 AMPS, 115V DC, 30 AMPS, 230V AC, 2 AMPS, 230V DC. COIL RATED 24V DC, 0.133 AMP., 4200 TURNS #32 WIRE, 180 OHMS DC RESISTANCE. 5/5/45 8BXX 125 CBM:C-67 MAY 45 COIL: MARK "D"	CATH-29585	TDQ	RELAY, OVERLOAD DPST NORMALLY CLOSED, CONTACTS WILL CLOSE 250 TO 500 MA, CONTACTS RATED 10 AMPS, AT 115V AC NON-INDUCTIVE. COIL DATA: 1750 TURNS #30 WIRE, 46 OHMS ±10% DC RESISTANCE, IN PARALLEL WITH RELAY, RHEOSTAT (CTC TYPE M-6635) USED WITH 4/23/45 700A CRY:M-422579P1 MAY 45 REV 7	CBZ-29590	TEC	CONTACTOR 2P, NORMALLY OPEN, 2 BREAKS PER CIRCUIT, CONTACT CURRENT 10 AMPS AT 230V, 60 CYC. COIL: 0.44 AMP INRUSH, 0.098 AMP, SEALED. COIL CONSISTS OF 3030 TURNS #34 WIRE, 270 OHMS DC RES., COIL TROPICALLY IMPREGNATED. 4/25/45 702 SIZE 00 Y-4056-D MAY 45 OPEN #435478
CAY-29579	MK 8, MOD 4	CIRCUIT BREAKER, THERMAL 3 PST NORMALLY OPEN, ONE BREAK PER CIRCUIT, CONTACTS RATED 250V AC, THERMAL ONLY 15 AMPS. SAME AS -29465 EXCEPT FOR THERMAL RATING. 4/20/45 S*999022 CAY:75-A-958 MAY 45 TYPE AB CHANGE 27	CATH-29585		THIS RELAY.	CBZ-29591	TEC	CONTACTOR 3P, NORMALLY OPEN, 2 BREAKS PER CIRCUIT, ONE NORMALLY OPEN INTERLOCK, CONTACT CURRENT 25 AMPS AT 230V, 60 CYC. COIL: 0.67 AMP INRUSH, 0.105 AMP SEALED. COIL CONSISTS OF 2530 TURNS #33 WIRE, 180 OHMS DC RESISTANCE, COIL TROPICALLY IMPREGNATED. 4/25/45 702 SIZE 1 Y-3238-D MAY 45 OPEN 435479
CAY-29580	TDQ	CIRCUIT BREAKER 2 POLE AIR CIRCUIT BREAKER, CONTACTS RATED 35 AMPS 125/250 VOLTS DC, 250V AC. 4/20/45 999085 TYPE AB CATALOG 29-060 MAY 45 "DE-10N"	CAU-29586	CRY-50254	RELAY OPERATES ON ANY DC VOLTAGE BETWEEN 8.5 AND 15V, CURRENT REQUIRED NOT TO EXCEED 76 MA AT 12V, CONTACTS RATED 1/2 AMP AT 350V DC RESISTIVE OR INDUCTIVE LOAD OR 1 WATT AUDIO AT 30 TO 600 OHMS, 4 SETS OF CONTACTS 2 SETS OF SPST AND 4/28/45 1-Z-13274 CRY:K-189256 MAY 45 SUB 1	CBZ-29591		IMPREGNATED.
CSI-29581	MK 8 MOD 4	RELAY MAX CURRENT IN COIL AT 110V AC, IS 5 MILLIAMPS, CONSISTS OF 17,500 TURNS OF #42 EM WIRE, CONTACTS RATED 3 AMPS, RESISTIVE LOAD AT 110V AC. 4/20/45 CSI:4RACHPL CAY:13-D-4039 MAY 45 CHANGE 0	CAU-29586		2 SETS OF SPDT.	CBZ-29592	TEC	CONTACTOR: 3 PST NORMALLY OPEN, 2 BREAKS PER CIRCUIT; CONTACT RATED 10 AMPS, 230V, 60 CYCLES, 0.44 AMP INRUSH, 0.098 AMP SEALED COIL CONSISTS 3030 TURNS #34 WIRE 270 OHMS DC RES. 230V, 60 CYCLES, TROPICALLY IMPREGNATED COIL. 4/25/45 702 OPEN SIZE 00 Y-4056-D MAY 45 435476
CRY-29582	MK 22	RELAY DPDT - 2 SETS OF TRANSFER CONTACTS, COIL OPERATING VOLTAGE MAX. 28.5V DC, MIN. 18.0 V DC AT 20°C, DC RESISTANCE - 350 OHMS MAX. 270 OHMS MIN. 0.086 AMPS MAX. TO 0.07 AMPS, MIN. AMB. TEMP. +70° MAX. -40°C, CONTACT PRESSURE (MAKE) 0.30 4/20/45 A8045 CM:ESO-691526 MAY 45 ISSUE 6	CBZ-29587	TEC	RELAY 2P 1 NORMALLY OPEN, 1 NORMALLY CLOSED, CONTACT RATED 230V, 10 AMPS, COIL CONSISTS OF 3030 TURNS #34 WIRE 270 OHMS DC RESISTANCE 5.8 WATTS 0.44 AMP INRUSH, 0.098 AMP, SEALED, COILS MOISTURE RESISTANT. 4/25/45 B110, 435474 Y-5536-D MAY 45	GGE-29593	MK 22	RELAY, SOLENOID: CONSISTS OF A SINGLE OPERATING COIL, CORE AND A MAGNETIC FIELD STRUCTURE, THE MAGNETIC FIELD STRUCTURE IS HELD STATIONARY WHILE THE CORE WHICH IS FREE TO MOVE, MOVES IN WHEN THE COIL IS ENERGIZED AND FALLS BACK WHEN THE COIL 4/25/45 G-34015 CM:ESO-691144 MAY 45 ISS. 5
GRAMS. (MIN.)		CRY-29582	CSD-29588	TEC	RELAY SPST NORMALLY OPEN, CONTACTS RATED 30 AMPS AT 115V, COIL CONSISTS OF 4,200 TURNS OF #32 WIRE, 180 OHMS DC RESISTANCE, 0.140 AMP, OPEN ARMATURE, 0.080 AMPS CLOSED ARMATURE, 110V. 4/25/45 8HXXX MAY 45	GGE-29593		IS DEENERGIZED, COIL RATED 26V DC, 0.3 AMPS; 3550 TURNS #30 WIRE, 100 OHMS AC RES.
CRY-29583	TDQ	RELAY, KEYING 3 PST NORMALLY OPEN, CONTACTS RATED 3 AMPS, 115 VOLTS AC NON-INDUCTIVE. COIL DATA: 17,300 TURNS #38 E.C. WIRE, 220 VOLTS DC MAX., 2000 OHMS DC RESISTANCE, KEYS 40 WORDS PER MINUTE, HEAVY DUTY BEARINGS. 4/23/45 TYPE "G" CRY:K-881753 P1 MAY 45 CAT. #A11996 REV 2	CBZ-29589	TEC	CONTACTOR SPST NORMALLY OPEN, 2 BREAKS PER CIRCUIT, ONE NORMALLY OPEN INTERLOCK CONTACT, CONTACT RATED 25 AMPS 230V, 60 CYC. COIL: 0.67 AMPS, INRUSH, 0.105 AMP SEALED. COIL CONSISTS OF 2530 TURNS #33 WIRE, 180 OHMS DC RES. 230V, 60 CYCLES. 4/25/45 702 SIZE 1 OPEN Y-3298-D MAY 45 #435477	CAY-29594	TEC	CONTACTOR: 3P, 1 NORMALLY OPEN, 1 NORMALLY CLOSED, CONTACTS RATED 100 AMPS, 230V, 60 CYCLES. COIL CONSISTS OF 850 TURNS #20-7113 WIRE, 6.4 OHMS RESISTANCE, "DE-10N" CONTACTOR WITH BLOW OUTS AND ARC SHOOTERS. 4/26/45 DH-330-P 59-D-334 MAY 45 S#967964

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CAY- 29595	TEC	4P. NORMALLY OPEN WITH 1 NORMALLY CLOSED INTERLOCK CONTACT. CONTACTS RATED 25 AMPS, 230V 60 CYCLES. CONSISTS OF 2750 TURNS #31 WIRE, 145 OHMS DC RES, 230V, 60 CYCLES. *OPEN CLASS 15-825 4/26/45, DN-140 SIZE 1 55-D-992 MAY 45 *SEE ABOVE	CEE- 29600		TACTS CONNECTED TO LARGE PINS.	CGE- 29605		-5%. SIMILAR TO -29514 EXCEPT FOR ARRANGEMENT AND OPERATING SEQUENCE OF CONTACTS.
CAY- 29596	TEC	RELAY: 2PST, SINGLE BREAK, NORMALLY OPEN CONTACT RATED 5 AMPS CARRY OR BREAK ON AC BREAK, -1 AMP DC. COIL RATED 4 AMPS MIN. 16 AMPS MAX. 12 AMPS CONTINUOUS. CONTACTS ARE REVERSIBLE SO AS TO AFFORD 2 MAKE OR 1 MAKE 1 BREAK OR 2 BREAK CON- 4/26/45 SC-1, 77-D-478 MAY 45 S#1096946	CCT- 29601	TBX-8	RELAY: 3 POLES: 1 SPST NORMALLY OPEN, 1 SPST NORMALLY CLOSED, 1 SPOT. COIL RESISTANCE 200 OHMS. 4/30/45 CCT-550-20-1 CG:M-7474156 MAY 45 MODIFIED REV. 1	CSD- 29606	TCZ	RELAY, KEYING CONSISTS OF 3PST, NORMALLY OPEN LEAF TYPE CONTACTS, ONE SPST-NORMALLY CLOSED LEAF TYPE CONTACT, 2 SPOT LEAF TYPE CONTACTS AND A TYPE -24163 SPDT VACUUM SWITCH. COIL RATED 28V DC MAX, 22V DC MIN. DC RES. OF EACH OF 2 COILS IS 30 5/1/45 78CCA100 COL:410 0011 00 MAY 45 REV 3
	CAY- 29596	TACTS.	CGE- 29602	TBX-8	RELAY: 3 POLES: 2 SPOT AND 1 SPST NORMALLY CLOSED CONTACT. INCLUDES COIL WITH 1850 TURNS #31 WIRE, 50 OHMS ±10% DC RESISTANCE. OPERATING VOLTAGE 8.5 TO 12.6V DC. *CGE:#165A-80V80 3/16 NO-G-37843 4/30/45 *SEE ABOVE CG:P-7767940 MAY 45 PT 1 REV. 2	CSD- 29605		OHMS +10% -5%. SIMILAR TO -29514 AND -29605 EXCEPT FOR ARRANGEMENT AND OPERATING SEQUENCE OF CONTACTS.
CLR- 29597	TDQ	RELAY: CONSISTS OF 2 SPST NORMALLY OPEN CONTACTS AND ONE SPDT CONTACT, CONTACT RATINGS: 6 AMPS 115V DC. COIL DATA: 12V DC 2200 TURNS #31E WIRE, 67 OHMS DC RESISTANCE. CONTACTS ADJUSTED SO THAT SPDT CONTACT CLOSURES BEFORE THE 2 SPST CONTACT CLOSURES BEFORE THE 2 SPST CONTACT CLOSURES. 4/26/45 2023 MXF CRV:K-882676P1 MAY 45 REV 1	CAOX- 29603	TCZ	RELAY, CONTROL: 3 PDT, NORMALLY OPEN. CONTACTS RATED 15 AMPS AT 28V DC. CONTINUOUS NON-INDUCTIVE LOAD. COIL RATED 28V DC NOMINAL 32V DC MAX AND 18V DC MIN, 150 OHMS ±10% DC RES. TEMP RISE IS 45°C ABOVE 55°C AT MAX COIL VOLTAGE. WILL OPERATE 5/1/45 R30F COL:405001200 MAY 45 REV 1	CGE- 29607	TCZ	RELAY, CONTROL 2PDT WITH ONE POLE, NORMALLY OPEN AUXILIARY. COIL RATED 28V DC NOMINAL, 32V DC MAX, 18V DC MIN, 125 OHMS ±10% DC RES. MAIN CONTACTS RATED 12 AMPS AT 28V DC. AUXILIARY CONTACTS RATED 8 AMPS AT 28V DC. CONTINUOUS NON-INDUCTIVE LOAD. 5/1/45 G-32811 COL:410 1700 00 MAY 45 REV D11051
	CLR29597	TACTS CLOSE AND OPENS AFTER THE 2 SPST CONTACTS OPEN.	CAOX- 29603		AT ALTITUDE OF 50,000 FT. SIMILAR TO -29513 EXCEPT CONTACTS ARE NORMALLY OPEN.	CGE- 29607		SAME AS -29515 EXCEPT FOR DIMENSIONS.
CLR- 29598	TDQ	RELAY: 4 PST NORMALLY OPEN. INTERLOCK NORMALLY OPEN. CONTACT RATING 6 AMPS 115V AC. COIL DATA: 60 VOLTS AC, 3000 TURNS #33E WIRE, 155 OHMS DC RESISTANCE. 4/26/45 COIL: #372 CRV:K-882741P1 MAY 45 REV 1	CGX- 29604	TCZ	RELAY, CONTROL 3PDT, NORMALLY CLOSED. CONTACTS RATED 10 AMPS AT 28V DC. CONTINUOUS NON-INDUCTIVE LOAD. COIL RATED 28V DC NOMINAL, 32V DC MAX AND 18V DC MIN, 150 OHMS ±10% DC RES. TEMP RISE IS 45°C ABOVE 50°C AT MAX COIL VOLTAGE. WILL OPERATE AT ALTITUDE 5/1/45 12957-1 COL:405 0009 00 MAY 45	CAOX- 29608	TCZ	RELAY, CONTROL 2PDT, WITH ONE POLE, NORMALLY OPEN AUXILIARY. COIL RATED 28V DC NOMINAL, 32V DC MAX, 18V DC MIN, 7.5V DC RELEASE, 185 OHMS ±10% DC RES. MAIN CONTACTS RATED 12 AMPS AT 28V DC. AUXILIARY CONTACTS RATED 8 AMPS AT 28V DC. CONTINUOUS NON-INDUCTIVE LOAD. SAME AS -29515 EXCEPT FOR DIMENSIONS AND COIL RESISTANCE. 5/1/45 R22A COL:410 0012 00 MAY 45 REV 2
CSD- 29599	QCN-2	RELAY: SPST SB NORMALLY OPEN CONTACTS RATED 6 AMPS 110V AC, 3 AMPS, 220V AC, 1 AMP, 115V DC (NON-INDUCTIVE LOAD). COIL RATED 110V, 60 CYCLES, 6 AMPS. 4/28/45 CX-2115 CBM-746-127 MAY 45 ALT 0	CGX- 29604		OF 50,000 FT. SIMILAR TO -29513 EXCEPT FOR DIMENSIONS AND CONTACT RATINGS.	CGX- 29604		
CEE- 29600	QFB	RELAY, THERMAL TIME DELAY: SPST NORMALLY OPEN. NON-COMPENSATING TYPE FOR CONTINUOUS HEATER EXCITATION ON 115V AC LINE. CONTROL CONTACTS TO CLOSE IN 30±5 SEC. AT 70° AMBIENT TEMP. 4-PRONG RADIO BASE. HEATER CONNECTED TO SMALL PINS AND CONTROL CONTACTS CON- 4/30/45 B-1511 CBM-746-334 MAY 45 ALT 0	CGE- 29605	TCZ	RELAY, KEYING CONSISTS OF 3PST NORMALLY OPEN LEAF TYPE CONTACTS, ONE SPST NORMALLY CLOSED LEAF TYPE CONTACT, 2 SPOT LEAF TYPE CONTACTS AND A TYPE -24163 SPDT VACUUM SWITCH. COIL RATED 28V DC MAX, 22V DC MIN. DC RES. OF EACH OF 2 COILS IS 30 OHMS ±10% 5/1/45 G-32877A COL:410 0008 00 MAY 45 REV D10812	CGE- 29609	TCZ	RELAY, CONTROL 2PDT. CONTACTS RATED 12 AMPS AT 28V DC CONTINUOUS. NON-INDUCTIVE LOAD. COIL RATED 28V DC NOMINAL, 32V DC MAX, 18V DC MIN, 150 OHMS ±10% DC RES. RELEASE VOLTAGE 7.5V DC MAX. SIMILAR TO -29516 EXCEPT FOR DIMENSIONS AND COIL RESISTANCE. 5/1/45 G-32734 COL:410 1600 00 MAY 45 REV D11050

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CAOX-29610 TCZ
 RELAY, CONTROL
 2PDT, CONTACTS RATED 12 AMPS AT 28V DC CONTINUOUS, NON-INDUCTIVE LOAD. COIL RATED 28V DC NOMINAL, 32V DC MAX, 18V DC MIN. 185 OHMS ±10% DC RES. RELEASE VOLTAGE 7.5V DC MAX, SIMILAR TO -29516 AND -29509 EXCEPT FOR DIMENSIONS AND COIL
 5/7/45 R228 COL:410 0015 00
 MAY 45 REV 2

RESISTANCE. CAOX-29610

CCO-29611 AN/APA-17A
 RELAY
 4PDT, CONTACTS RATED 10 AMPS AT 115V AC, OR 24V DC, 0.5 AMP AT 115V DC. COIL DATA: PULLS IN AT 17.5V MAX, AND DROPS OUT AT 8.5V MAX; 200 OHMS DC RESISTANCE. SIMILAR TO -29261 EXCEPT FOR COIL DATA.
 5/2/45 80Y12034 CKB:36-A00A046-1
 MAY 45 1 REV E

CSD-29612 NH-14A
 RELAY SPST DB, NORMALLY OPEN. SILVER CONTACTS RATED 1 AMP, 115V DC, 6 AMP, 115V AC, 3 AMP, 220V AC. COIL RATED 100V DC 0.061 AMPS, 7500 TURNS #40 WIRE; 1400 OHMS DC RESISTANCE. INCLUDES A 2000 OHM RESISTOR IN SERIES WITH THE COIL FRONT
 *OLD CSD /CXE 1898, CCBM TYPE 746-114
 5/4/45 1HX100 CBM:C-56
 MAY 45 COIL:"75A" θ *SEE ABOVE

CSD-29612 CONTACTS, ISOLANTITE BASE.

CATH-28613 TDD
 RELAY
 DPDT, CONTACTS RATED 5 AMPS AT 115V AC NON-INDUCTIVE. NORMAL OPERATING VOLTAGE 32V DC. COIL (768): 54 TURNS #35 P.E. WIRE, 480 OHMS DC RES.
 5/5/45 204AM
 MAY 45

CATH-29614 TDD
 RELAY
 SPST, DOUBLE MAKE, CONTACTS RATED 30 AMPS AT 115V AC NON-INDUCTIVE. NORMAL OPERATING VOLTAGE 110V AC. COIL (#67): 4308 TURNS #34 P.E. WIRE, 280 OHMS DC RES.
 5/5/45 961C
 MAY 45

CSD-29615 SF
 RELAY
 DPST, NORMALLY OPEN. CONTACTS 6 AMPS, 115V AC, 1 AMP 115V DC, 3 AMPS 230V AC. COIL RATED 110V DC, 20 MA, 1000 TURNS #42 WIRE, 5300 OHMS DC RESISTANCE.
 CCBM TYPE 746-497
 5/5/45 1BXX125 CBM:C-59
 MAY 45 θSEE ABOVE

CSD-29616 SF
 RELAY, TIME DELAY
 SPOT CONTACTS RATED 1/2 AMP, 115V DC. COIL RATED 110V DC, 8500 TURNS #41 WIRE, DC RESISTANCE 4150 OHMS INCLUDING 2000 OHM RESISTOR IN SERIES WITH THE COIL. TIME DELAY 1 MINUTE.
 CCBM TYPE 746-496 *CSD:7512
 5/7/45 PTAH 125 CBM:C-68 (FOR
 MAY 45 COIL:"85A" θ DIMENSIONS ONLY) *

CRY-29617 YR
 RELAY
 SPST, NORMALLY OPEN. COIL RATED 220V DC. CONSISTS OF 30,600 TURNS #38 ENAMEL COTTON WIRE, 3300 OHMS DC RES. AC NON-INDUCTIVE CONTACT RATING IS 3 AMPS AT 150 WATTS.
 5/7/45 TYPE C CATALOG
 MAY 45 CONTACT FORM 1A

CRY-29618 YR
 RELAY
 DPST, NORMALLY OPEN. COIL RATED 220V DC. CONSISTS OF 30,600 TURNS #38 ENAMEL COTTON WIRE, 3300 OHMS DC RES. AC NON-INDUCTIVE CONTACT RATING IS 3 AMPS AT 150 WATTS.
 5/7/45 TYPE C
 MAY 45 CONTACT FORM 2A

CRY-29619 YR
 RELAY
 DPST, ONE CONTACT NORMALLY OPEN, ONE NORMALLY CLOSED. COIL RATED 220V DC. CONSISTS OF 30,600 TURNS #38 ENAMEL COTTON WIRE, 3300 OHMS DC RES. AC NON-INDUCTIVE CONTROL RATING IS 3 AMPS AT 150 WATTS.
 5/7/45 TYPE C CONTACT
 MAY 45 FORM 1A & 1B

CSD-29620 SF-1
 RELAY, TIME DELAY
 SPOT CONTACTS RATED 1/2 AMP, 110V DC. COIL RATED 110V DC, 20 MA (APPROX.); 5000 OHMS DC RESISTANCE; 10,000 TURNS #42 WIRE. TIME DELAY 1 MINUTE.
 CCBM TYPE 746-519 *CSD:PTAH 125
 5/7/45 PTAH 18 CBM:C-68 (FOR
 MAY 45 COIL:7556-42θ DIMENSIONS ONLY)*

CSD-29621 MAB
 RELAY
 3PDT CONTACTS RATED 6 AMPS 115V AC, 0.5 AMPS, 115V DC. COIL RATED 120V DC, 8500 TURNS #41 WIRE; 4150 OHMS DC RESISTANCE INCLUDING 2000 OHM RESISTOR IN SERIES WITH THE COIL.
 CCBM TYPE 746-104, OLD CSD TYPE CS1396
 5/7/45 1XCX1052 CBM:C-82
 MAY 45 COIL:"85A"θ CSD:10924

CSD-29622 MAA
 SPOT SB CONTACTS RATED 6 AMPS, 115V DC, 0.5 AMPS, 115V DC. COIL RATED 60V DC, 7500 TURNS #40 WIRE, 1400 OHMS DC RES.
 CCBM TYPE 746-86, OLD CSD TYPE CX2866, CXF 1396
 5/7/45 1XCX100 CBM:C-82
 MAY 45 COIL 75A θ

CAUH-29623 SU, SU-1
 RELAY, TIME DELAY
 CONSISTS OF TYPE GRL-39 MICROSWITCH OPERATED BY A TIMER MOTOR. THE SWITCH IS SPST WITH CONTACTS RATED 10 AMPS AT 110V AC. THE MOTOR OPERATES ON 110-120 VOLTS, 60 CPS, WITH A 60 (+2-5) SECOND TIME DELAY. MOTOR COIL HAS 3900 TURNS #37 WIRE;
 5/8/45 HXS-252 CDM:746-452
 MAY 45 ALT 0

CAUH-29623 500 OHMS ±10% D.C RESISTANCE.

CHP-29624 TAB,TBU,TBK,TBM
 RELAY, TIME DELAY;
 N.O. CLOSING 30 SEC. AFTER START. HERMETICALLY SEALED. CONTAINS SYNCHRONOUS MOTOR, CLOSING A MICROSWITCH THROUGH A GEAR TRAIN, 3" DIAM, 3 1/2" HIGH. FOR 11 VOLTS, 60 CYCLE OPERATION OTHERWISE SAME AS NAVY TYPE -29670.
 5/8/45 CHP:5111(60-) CAY:P-7710009-G1
 JUN. 45 SUB 7

-29625 AN/SPT-6A
 RELAY, TIME DELAY;
 SPST, NORMALLY OPEN. CONTACTS RATED 115 VOLTS, 6 AMPS AC OR DC; 110 SECOND DELAY IN CLOSING NOMINAL. ENCLOSED IN A VACUUM TUBE, 6 PRONGS.
 5/8/45 CAGK-6N0-110 CKV:A-62238-1
 JUN. 45 CEE:CHR2-4AM56 REV 4

CAU-29626 AN/CPN-6
 RELAY;
 SINGLE POLE. CONTACTS RATED 1 AMP 115V AC, NORMALLY CLOSED. RELAY TO OPEN CONTACTS WHEN THE CURRENT IS SLOWLY INCREASED TO 7 MA OR LESS. RELAY TO RECLOSE CONTACTS WHEN THE CURRENT IS DECREASED TO NOT MORE THAN 4 MA. COIL
 5/3/45 H7726-1 CGG-59C106237
 JUN. 45

CAV-29626
 RATED 52 TO 162V DC, 3300 OHMS DC RESISTANCE.

CGE-29627 UN
 RELAY;
 SPST, NORMALLY CLOSED. CONTACTS RATED 5 AMPS, 250V AC, OR 10 AMPS, 150V AC, 60 CPS. OPERATING PRESSURE 25 GRAMS MIN. COIL RATED 10 1/2 VOLTS, 0.024 AMPS, 20 CPS; 1100 TURNS #29E WIRE, 15.2 OHMS (±10%) DC RES.
 5/8/45 G25352 CW:3A-10261-1
 JUN. 45 ISS. 1*

CV-29628 UN
 VOLTMETER RELAY, AC;
 SINGLE CONTACT TYPE, MANUALLY RESET; CONTACT MAKES AT 0.55V, 60 CPS, ±0.05V ON DECREASING VOLTAGE. CONTACT CAPACITY 5 WATTS OR 50 MA AT 110V MAX. FOR USE WITH FREQUENCIES 255-3145 CPS. METAL *CW:SSL-629575-1SS 1 ESL-304671 ISS 5
 5/8/45 SPEC. MODEL 705 *SEE ABOVE
 JUN. 45 CWKS-8385 ISS 1

CV-29628
 CASE
 FINISHED WITH TYPE 8 EXTERNAL RECTIFIER AND RESISTANCE BOX AND A 4 DISC FULL WAVE BRIDGE TYPE COPPER OXIDE RECTIFIER.

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Class 29—Electromagnetic Contact Devices

3.29-37

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CAU-29629	AN/CPN-6	RELAY OVERLOAD: 2 SETS OF CONTACTS, 2 POLE NORMALLY CLOSED. CONTACTS RATED 135W, 3 AMPS MAX AC OR DC, SINGLE WOUND. 32 TO 162 VOLTS DC 3000 OHMS DC RESISTANCE SLOW RELEASE. LOWER CONTACT SET 0.025" POLE GAP AND UPPER CONTACT SET 0.014" POLE GAP. LOWER 5/9/45 ASR-H77419-1 CCG-59C102356 JUN. 45	CSD-29635	NM-14	RELAY 2 PST NORMALLY OPEN. SILVER CONTACTS RATED 6 AMPS 115V AC, 1 AMP 115V DC 3 AMPS. 230V AC. COIL RATED 220V AC, 0.024 AMPS. CLOSED. 0.041 AMPS OPEN. IMPEDANCE AT 60 CYCLES 9700 OHMS. 2910 OHMS DC RES CBM-609-24, OLD CSD TYPE CS-1730 5/9/45 1BXX CBM-746-10 JUN. 45 COIL: "100A" Ø	CH-29641	SR-2	RELAY, TIME DELAY SPST, NORMALLY OPEN, SINGLE BREAK PER CIRCUIT. CONTACTS RATED 5 AMPS, 115V, 60 CPS. SHADED POLE SYNCHRONOUS MOTOR, 115V, 60 CPS, 0.05 AMP, 2 WATTS INPUT. TOTALLY ENCLOSED REDUCTION GEAR TRAIN BUILT IN. 1/2 MINUTE TO 3 MINUTES 5/10/45 RX1036 CRV:M-439060-1 JUN. 45
CAU-29629		CONTACTS SET TO OPEN AT .005 AMP WITH 0.001 AMP MIN DROP OUT; 0.300 SEC MINIMUM RELEASE TIME. COIL AND FRAME IMPREGNATED WITH ANTI FUNGUS VARNISH.	CSD-29635		1000 TURNS #42 WIRE.	CH-29641		ADJUSTABLE DELAY.
CLR-29630	AN/CPN-6	RELAY: ONE CONTACT NORMALLY OPEN, DOUBLE BREAK 15 AMP 115V AC. SECOND CONTACT NORMALLY CLOSED 4 AMP 115V AC. COIL DATA - SINGLE WINDING, 115V AC; 0.065 MA. 50-70 CPS, 530 OHMS DC RESISTANCE. TO OPERATE IN TEMPERATURE FROM -40°C TO +50°C. FAST 5/9/45 1326-DEW CCG-59C100360 JUN. 45	CH-29636	SR-2	RELAY: 5 PST, SINGLE BREAK, NORMALLY OPEN, 3 SINGLE POLE CONTACTS RATED 35 AMPS, 2 SINGLE POLE CONTACTS RATED 10 AMPS. ALL CONTACTS RATED 115V, 60 CPS. COIL RATED 115V, 60 CPS, 0.1 AMP; 2600 TURNS #34E WIRE, 140 OHMS DC RES. 5/9/45 RX-981 CRV:P-719549-1 JUN. 45 REV. 2	CSD-29642	NM-14	RELAY 3PST, NORMALLY OPEN, SILVER CONTACTS RATED 4 AMPS, 115V DC, 30 AMPS, 230V AC. FRONT CONTACTS. COIL RATED 220 VOLTS, 60 CYCLES, 0.056 AMPS. ARMATURE CLOSED, 0.098 AMPS. ARMATURE OPEN; 7000 TURNS ØPART OF CBM TYPE 746-109 5/10/45 CXA-2366 CBM:SKETCH JUN. 45 COIL: MARK "M" E
CLR-29630		ACTING IMPREGNATION FOR TROPICAL USE.	CSD-29637	SR-2	RELAY: SINGLE POLE, 8 STEPS, CONTACTS TO OPEN BETWEEN STEPS. CONTACTS RATED 25 AMPS, 115V, 60 CPS, INDUCTIVE LOAD, 1/2 AMP, 115V DC. COIL RATED 115V, 60 CPS, 1.0 AMPS; 1000 TURNS #29SCE WIRE, 21.8 OHMS DC RES. 5/9/45 96LXH101 CRV:P-719589-1 JUN. 45 REV. 0	CSD-29642		#35 WIRE; 4107 OHMS IMPEDANCE AT 60 CYCLES; 600 OHMS DC RESISTANCE.
CCX-29631	AN/CPN-6	RELAY, TIME DELAY: SPDT, NORMALLY CLOSED. CONTACT RATING 125V AC, 10 AMP. COIL DATA: SINGLE WINDING; 115V, 550 OHMS DC RESISTANCE. 20 SEC +2 SEC. TIME DELAY. ANTI-FUNGUS TREATED. CCGG #59K48804 5/9/45 T06-20 SEC CCG-59C48806 JUN. 45 ØSEE ABOVE	CSD-29638	SR-2	OVER-CURRENT BREAKER: BREAKS AT 15 AMPS. PUSH BUTTON RESET. CONTACTS RATED 15 AMPS, 115V AC. 5/9/45 CDM-15 CRV:K-887651-1 JUN. 45 REV. 1	CSD-29643	NM-14	RELAY, THERMAL TIME DELAY SPST, NORMALLY OPEN, SILVER CONTACTS RATED 0.1 AMP, AT 440V AC. 45 SECONDS CLOSING TIME. HEATER COIL RATED 440V, 60 CYCLES. 2000 OHM RESISTOR IN SERIES WITH THE COIL. *PART OF CBM TYPE 746-109 5/10/45 T0-564 CBM:C-89 JUN. 45 *SEE ABOVE
CCX-29632	AN/CPN-6	RELAY, TIME DELAY: SPDT, NORMALLY CLOSED. SILVER CONTACTS RATED 125V AC, 10 AMP. COIL DATA: SINGLE WINDING, 115 VOLTS, 550 OHMS DC RESISTANCE. 130 SEC -0+30 SEC TIME DELAY ANTI-FUNGUS TREATED. CCGG #59K48305 5/9/45 T06-180 SEC CCG 59C48806 JUN. 45 ØSEE ABOVE	CSD-29639	NM-14	RELAY: 3 PST NORMALLY OPEN. SILVER CONTACTS RATED 4 AMPS 115V DC, 30 AMPS 230V AC. FRONT CONTACTS. COIL RATED 75V DC, 12000 TURNS #37 WIRE, 1600 OHMS DC RES. ØPART OF CBM TYPE 746-109 5/10/45 CXA-2366 JUN. 45 COIL: MARK "X" Ø	CSD-29644	NM-14 A	RELAY, THERMAL TIME DELAY SPST, NORMALLY OPEN, SILVER CONTACTS RATED 0.1 AMP, AT 440V AC. 45 SECONDS TO CLOSE. HEATER COIL RATED 220V 60 CYCLES. 300 OHMS DC RESISTANCE. 925 OHM RESISTOR IN SERIES WITH COIL. *PART OF CBM TYPE 746-110 5/10/45 T0-564A CBM:C-89 JUN. 45 *SEE ABOVE
CCX-29633	AN/CPN-6	RELAY, TIME DELAY: SPDT, NORMALLY CLOSED. SILVER CONTACTS RATED 125 VOLTS AC, 10 AMP. COIL DATA: SINGLE WINDING, 115 VOLTS, 550 OHMS DC RESISTANCE 2 SEC (-0+5 SEC) TIME DELAY. ANTI-FUNGUS TREATED. CCGG#59C48306 5/9/45 T06-20-30 SEC CCG-59C48806 JUN. 45 ØSEE ABOVE	CSD-29640	NM-14	RELAY 1PDT, 1PST, NORMALLY OPEN. SILVER CONTACTS RATED 30 AMPS, 115V DC, 15 AMPS, 230V AC. FRONT CONTACTS. COIL RATED 440V AC, 60 CYCLES, 0.024 AMPS ARMATURE CLOSED; 0.038 AMPS. ARMATURE OPEN; IMPEDANCE AT 60 CYCLES 18335 OHMS. 15000 5/10/45 CXA-2854 CBM:SKETCH JUN. 45 COIL: MARK "H" PART OF 746-109	CSD-29645	NM-14 A	RELAY SPDT, SPST, NORMALLY OPEN. SILVER CONTACTS RATED 15 AMPS, 230V AC, 30 AMPS, 115V DC. FRONT CONTACTS. COIL RATED 220V 60 CYCLES, 0.056 AMPS ARMATURE CLOSED, 0.098 AMPS. ARMATURE OPEN; 7000 TURNS ØPART OF CBM TYPE 746-110 5/10/45 CXA-2854 CBM:SKETCH JUN. 45 COIL: MARK "M" Ø
CBZ-29634	SR-2	RELAY: DPST, DOUBLE BREAK NORMALLY CLOSED, CONTACTS RATED 10 AMPS, 115V; NON-INDUCTIVE LOAD. COIL RATED AT 115V, 60 CPS, 0.92 AMPS INRUSH, 0.204 AMPS SEALED 1450 TURNS #31E WIRE, 67 OHMS DC RES. 5/9/45 BULLETIN 700 CRV:M-433221 JUN. 45 B020 REV. 0	CSD-29640		35 WIRE; 3200 OHMS DC RESISTANCE.	CSD-29645		#35 WIRE; 4107 OHMS IMPEDANCE AT 60 CYCLES; 600 OHMS DC RESISTANCE.

RESTRICTED

NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CSD- 29646	NM-14 A		CSD- 29653	QCL-5		CSD- 29658		
RELAY 3PST. NORMALLY OPEN. SILVER CONTACTS RATED 4 AMPS. 115V DC. 30 AMPS. 230V AC. FRONT CONTACTS. COIL RATED 100V DC. 15000 TURNS #39 WIRE. 3200 OHMS DC RES.			RELAY. PHONE OPST. SINGLE BREAK. NORMALLY CLOSED. CONTACTS RATED 1 AMP. 115V DC. 6 AMPS. 115V AC. 3 AMPS. 230V AC. COIL RATED 75V DC. 8500 TURNS #41 WIRE. 2150 OHMS DC RESISTANCE.			CYCLES; ARMATURE OPEN 0.092 AMPS; CLOSED 0.054 AMPS.		
PART OF CBM TYPE 746-110 5/10/45 CX4-2366 CBM:SKETCH JUN. 45 COIL: MARK "H"Θ			OLD CSD TYPE CX4-1848A. CBM TYPE 746-82 5/12/45 1XXR101 CBM:T746-82 JUN. 45 COIL:85AAΘ					
CSD- 29647	NM-14		CSD- 29654	WAA		CSD- 29659	QCR-1	
RELAY SPST DOUBLE BREAK. NORMALLY OPEN. SILVER CONTACTS RATED 1 AMP. 115V DC. 6 AMPS. 115V AC. 3 AMP. 230V AC. FRONT CONTACTS. COIL RATED 75V DC. 8500 TURNS #41 WIRE; 2150 OHMS DC RESISTANCE.			RELAY. POWER DPST. DOUBLE BREAK. FRONT AND BACK CON- TACTS RATED 30 AMPS. 115V AC. 4 AMPS. 115V DC. 30 AMPS. 230V AC. 2 AMPS. 230V DC. COIL RATED 60V DC. 9000 TURNS #36 WIRE. 930 OHMS DC RESISTANCE. ALSO HAS OLD CSD TYPE CX-2867. CBM TYPE 746-85 5/12/45 84X2102 CBM:C-71 JUN. 45 COIL: "1" Θ			RELAY. TIME DELAY THERMAL SPST CONTACTS RATED 3 AMPS. 115 VOLTS. 60 CYCLES. RELAY SHOULD CLOSE IN 42 SEC- ONDS. INSULATION TEST 800V RMS HEATER TO CONTACT. REPEAT WITH 500V DC MEGGAR. SAME AS CSD TYPE PVA2. *CSD:P-5670A. CBM TYPE 746-147 5/14/45 T056413 CBM:C-70 JUN. 45 BSEE ABOVE *SEE ABOVE		
OLD CSD TYPE CX-1898. CBM TYPE 746-113 5/10/45 1HXX100 CBM:C-56 JUN. 45 COIL: MARK "85A"Θ								
CSD- 29648	NJ-3		CSD- 29654			CSD- 29659		
RELAY. MIDGET DPDT CONTACTS RATED. 6 AMPS. 115V AC. COIL RATED 110V AC. 60 CYCLES. 5000 TURNS #38 WIRE. 605 OHMS DC RESISTANCE. ISOLANTITE BASE.			BLOW OUT COIL RATED 8 AMPS; 63 TURNS #16 WIRE. 0.04 OHMS DC RESISTANCE.			HEATER COIL #40 NICHROME WIRE. 660 OHMS ± 10% DC RESISTANCE.		
OLD CSD TYPE CX-1898. CBM TYPE 746-31 5/10/45 1XBX112 CBM:C-55 JUN. 45 COIL: "50A"Θ *SEE ABOVE								
CSD- 29649	WAB		CSD- 29655	WCA		CSD- 29660	NM-14	
RELAY. MIDGET OPDT SINGLE BREAK. CONTACT RATINGS: 6 AMPS. 110V AC. 1 AMP. 115V DC. 3 AMPS. 230V AC. COIL: 60 VOLTS DC. 7500 TURNS #40 WIRE. 1400 OHMS DC RESISTANCE.			RELAY. MIDGET DPDT. NORMALLY CLOSED. CONTACTS RATED 1 AMP. 115V DC. 6 AMPS. 115V AC. 3 AMP. 230V AC. COIL RATED 75V DC. 8500 TURNS #41 WIRE. 2150 OHMS DC RESISTANCE.			RELAY. POWER 4PSB. NORMALLY OPEN. CONTACT RATINGS: 30 AMP. 110V AC. 4 AMP. 110V DC. 25 AMP. 220V AC. 0.75 AMP. 220V DC. COIL RATED 220V AC. 7000 TURNS #35 WIRE. 600 OHMS DC RESISTANCE; ARMATURE OPEN 0.098 AMPS. CLOSED 0.056 AMPS. 4107 OHMS IMPEDANCE 5/14/45 AFBJB CBM:SKETCH JUN. 45 COIL: MARK "N" CBM TYPE 609-25		
OLD CSD TYPE CX-1898. CBM PART #746-84 5/10/45 1XBX112 CBM:C-55 JUN. 45 COIL: 75A Θ			OLD CSD TYPE CS1729A. CBM TYPE 746-166 5/4/45 1XBX105 CBM:C-60 JUN. 45 COIL: 85A *SEE ABOVE					
CSD- 29650	WCA		-29656	DBE		CSD- 29660		
RELAY. MIDGET DPDT SINGLE BREAK. CONTACT RATINGS: 6 AMPS. 115V AC. 1 AMP. 115V DC. 3 AMP. 230V AC. COIL: 75V DC. 8500 TURNS #41 WIRE 2150 OHMS DC RESISTANCE.			CIRCUIT BREAKER CURRENT RATING 5 AMPS. TRIPPING TIME 30 SECONDS ± 15 SECONDS AT 25° ± 5°C.			AT 60 CYCLES. FRONT CONTACT. BAR MOVING CONTACT.		
OLD CSD TYPE CX-1898. CBM TYPE 746-169A 6/11/45 1XRX112 CBM:C-55 JUN. 45 COIL: 85A Θ *SEE ABOVE			5/12/45 CS0:PM-5 CS:238800 JUN. 45 CG:MCM-2405 REV. 0					
CDE- 29651	YR		CSD- 29657	WBA		CSD- 29661	NM-14	
CONTROL RELAY UNIT CONTAINS ONE POLARIZED RELAY AND TWO DPDT RELAYS. THIS UNIT WITH NAVY TYPE -23506 REMOTE CONTROL UNIT PROVIDES FOR REMOTE CONTROL OF THE MODEL YR EQUIP- MENT.			RELAY. MIDGET DPDT SINGLE BREAK. CONTACTS RATED 6 AMPS 115V AC. 1 AMP. 115V DC. 3 AMPS. 230V AC. COIL RATED 100V DC OR 110V DC OPE- RATING; 7500 TURNS #40 WIRE; 1400 OHMS DC RESISTANCE. OPERATES IN SERIES WITH A CBM TYPE 746-92. OLD CSD TYPE CXD-1898 5/14/45 1XBX104 CBM:746-92 JUN. 45 COIL: "75A" Θ			RELAY SP DOUBLE BREAK. NORMALLY OPEN. SILVER CONTACTS RATED 30 AMPS. 115V AC. 6 AMPS. 115V DC. 30 AMPS. 230V AC. 3 AMPS. 230V DC. FRONT CONTACTS. COIL RATED 220V. 60 CYCLES; 7000 TURNS #35 WIRE; 600 OHMS DC RES.; ARM. CLOSED 0.056 AMPS.; OPEN 5/14/45 CX-3161 CBM:C-74 JUN. 45 COIL: MARK "N" CBM TYPE 746-111		
5/12/45 JUN. 45								
CAU- 29652	NJ.3.4.7.9		CSD- 29657			CSD- 29661		
RELAY 1 SPDT AND 1 SPST NORMALLY CLOSED. CON- TACTS WILL BREAK OR MAKE AND CARRY 110 WATTS BUT NOT MORE THAN 3 AMPS. COIL RATED 115V. 60 CYCLES. 120 OHMS DC RE- SISTANCE. OPERATION TIME 0.002 TO 0.025 SEC. RELEASE TIME 0.005 TO 0.040 SEC. A 5/12/45 R3070A1 CBM:C-15 JUN. 45 TYPE 746-157			2000 OHM "AB" RESISTOR.			0.098 AMPS. ALSO HAS 8 AMP BLOWOUT COIL.		
CAU- 29652			CSD- 29658	QCR		CSD- 29662	QCH-2	
QUICK ACTING GRIO PURPOSE AC RELAY.			RELAY 3PST - 2 POLES SINGLE BREAK. ONE POLE DOUBLE BREAK - CONTACTS RATED 115V AC. 15 AMPS. FRONT CONTACTS. COIL RATED 110V 60 CYCLES. 5000 TURNS #38 WIRE. 605 OHMS DC RESISTANCE. 2037 OHMS IMPEDANCE AT 60 CSO:P-4215. OLD CCO TYPE CXB-3251 5/14/45 1BAX101 CBM:746-123 JUN. 45 COIL: "50A" Θ			RELAY 3PST. SINGLE BREAK. NORMALLY OPEN. CON- TACT RATINGS: 30 AMPS 110V AC. 4 AMPS. 110V DC. 25 AMPS. 220V AC. 2 AMPS. 220V DC. WITH TWO BLOW-OUT CONTACTS RATED 75 VOLTS. 7.5 AMPS. COIL RATED 115V DC. SAME AS -29031 EXCEPT LATTER IS GEARED 5/14/45 CS-D904A CBM:746-70 JUN. 45 CBM TYPE 746-98		

Class 29—Electromagnetic Contact Devices

3.29-39

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
		CSD- 29662	CGX- 29668 TDH			CAU- 29673		
		FOR AC OPERATION AND THIS FOR DC OPERATION.	RELAY, CONTROL DPST NORMALLY OPEN. CONTACTS 3/16" DIA. FINE SILVER. RATED 100 VOLTS. 5 AMPS (BREAK OR MAKE); 100 VOLTS. 7.5 AMPS. (CONT.). COIL OPERATING CURRENT 0.3 AMP. DC OR LESS FOR POSITIVE OPERATION. 0.5 AMPS FOR CONTINUOUS OPERATION WITHOUT			MA 2.0V. RELEASE; 9000 TURNS #35EC WIRE. 600 OHMS DC RES. OPERATING TIME 77/50/40/20/13 MA 0.0126/0.0173/0.0234/0.0564/0.1450 SECS.		
			JUN. 45			REV. 6/11/43		
		CSD- 29663 QCR	CGX- 29668			CAU- 29674 TDH SERIES		
		RELAY, POWER 3PST. SINGLE BREAK. NORMALLY OPEN. CONTACTS RATED 30 AMPS. 115V AC. 4 AMPS. 115V DC. 30 AMPS. 230V AC. 0.75 AMPS. 230V DC. COIL RATED 120V DC. 14700 TURNS #36 WIRE. 1900 OHMS DC RESISTANCE. QCBM TYPE 746-62A. OLD CSD TYPE ATBDB 5/15/45 8CXX CBM:746-62 ALT JUN. 45 COIL: "150" Ø	OVERHEATING DC RESISTANCE 7.5 OHMS APPROX.			RELAY SPDT (BREAK-MAKE). SINGLE WOUND QUICK ACTING SINGLE ARM. CONTACTS RATED 3 AMPS. 110 WATTS. COIL RATED 120.0 MA AT 48.0V NOMINAL. 120 MA AT 6.5V MIN. 12.0 MA AT 5.0V. RELEASE. OPERATING TIME AT QCOIL:H-70226-ASM 12 5/21/45 AQA:H-70226 COL:972 1001 00 JUN. 45 AS#1 Ø REV. 9/14/43		
		CSD- 29664 QCR-1	CAU- 29669 TDH			CAU- 29674		
		RELAY, POWER 3PST. SINGLE BREAK. NORMALLY OPEN. CONTACTS RATED 30 AMPS. 110V AC. 25 AMPS. 220V AC. 4 AMPS. 110V DC. 2 AMPS. 220V DC. COIL RATED 75V DC. 10500 TURNS #35 QCBM:746-62 FOR DIM. TYPE 746-62B. OLD CSD AT 8D875 5/15/45 8CXX CBM:C-63 JUN. 45 COIL: "105"Ø	RELAY SINGLE WOUND. QUICK-ACTING. DOUBLE ARM. LEFT CONTACT ASSEMBLY DPDT. RIGHT CONTACT ASSEMBLY DPDT. CONTACTS RATED 3 AMPS. 110 WATTS. COIL RATED 14MA 19 VOLTS MINIMUM; 35 MA 48 VOLTS NOMINAL; 8 MA 11 VOLTS RELEASE. 1350 OHMS DC RES. 5/18/45 AQA:H-70226-21 COL:972 7000 00 JUN. 45 COIL:H-70226-14 REV. 9/4/43			48/36/28/20/12 VOLTS 0.0106/0.0129/0.0167/0.0246/0.0437 SECS. 400 OHMS DC RESISTANCE.		
		CSD- 29664	CHP- 29670 TAB.TBU.TBK.TBM			CAU- 29675 TDH SERIES		
		WIRE. 1000 OHMS DC RESISTANCE. FRONT CONTACT NORMALLY OPEN.	RELAY, TIME DELAY N.O. CLOSING 30 SEC. AFTER START. HERMETICALLY SEALED. CONTAINS SYNCHRONOUS MOTOR CLOSING A MICROSWITCH THROUGH A GEAR TRAIN. 3" DIAM. 3 1/2" HIGH. FOR 11 VOLTS 25 CYCLE OPERATION. OTHERWISE SAME AS NAVY TYPE -29624. 5/19/45 CHP:5111(25H) CAY:7710010-1 SUB. 3 JUN. 45			RELAY SINGLE WOUND. QUICK ACTING. SINGLE ARM. 1 SPST NORMALLY CLOSED CONTACT 1 SPST (MAKE-BEFORE-BREAK) CONTACT. 1 SPST NORMALLY OPEN CONTACT. CONTACTS RATED 3 AMPS. 110 WATTS. COIL RATED 35.5 MA QCOIL:H-70226 ASM14 5/21/45 AQA:H-77029-1 COL:972 1500 00 JUN. 45 GSEE ABOVE REV. 5/22/43		
		CAOX- 29665 RDZ	CAUH- 29671 SU,SU-1			CAU- 29675		
		RELAY, SWITCHING & LATCHING CONTACTS RATED 126.5V AC MAX. 1 AMP MAX. SINGLE WOUND COIL RATED 115V AC. 60 MA AT 60 CYCLES WITH 60 OHMS DC RESISTANCE.	RELAY, TIME DELAY SPST NORMALLY OPEN. SWITCH ACTUATED BY A 115V AC INDUCTION TYPE MOTOR WITH A TIME DELAY OF 3 MINUTES. MOTOR HAS 3900 TURNS #37 WIRE. 500 OHMS DC RESISTANCE. CONTACTS RATED 10 AMPS. 125V AC. QCBM TYPE 746-403 5/21/45 HXS 250 Ø CAUH:HXS250 JUN. 45			48.0V NOMINAL. 8.5 MA 12.0V MIN. 4.5 MA 6.0V RELEASE. 1300 OHMS DC RES. OPERATING TIME AT 48/32/24/16/12 VOLTS 0.0093/0.0078/0.0066/0.0047/0.0030 SECS.		
		5/17/45 CBM:H560-7 REV. 0 JUN. 45	CKU- 29672 TDH SERIES			COL- 29676 TDH SERIES		
		CAYP- 29666 TDH	RELAY, SENSITIVE SPDT CONTACTS OF COIN SILVER RATED 2 AMPS. AT 110 VOLTS NON-INDUCTIVE LOAD. COIL RATED 24 MA TO 12 MA AT 24 TO 48 VOLTS. 2.5 MA AT 5.0 VOLTS. 0.5 MA AT 1.1 VOLTS. OPERATING TIME AT 12/24/48 VOLTS 0.03/0.013/0.007 SECS. RELEASE 5/21/45 223C-38A COL:408 7000 00 JUN. 45			CONTACTOR MOTOR ASSEMBLY DPST NORMALLY OPEN. CONTACTS RATED 600V. 10 AMPS. 5000 VOLTS INSULATION TO GROUND 48 VOLT IMPREGNATED COIL. 680 OHMS DC RESISTANCE. QCOL:4057100;040441700C00..404 1800 00 QCOIL:CAO TYPE 131 5/21/45 COL:571 1524 20 COL:1524 B-2 JUN. 45 GSEE ABOVE REV. D9863 *		
		24°C. OPERATING TEMP. RANGE -10°C TO +60°C.	CKU- 29672			CBZ- 29677 TDH SERIES		
		CAYP- 29666	TIME AT 12/24/48 VOLTS 0.005/0.006/0.007 SECS.			CONTACTOR, POWER 3P NORMALLY OPEN CONTACTS RATED 50 AMPS. 1P RIGHT AUXILIARY NORMALLY CLOSED AND 1P LEFT AUXILIARY NORMALLY OPEN. IMPREGNATED COIL RATED 220 VOLTS 60 CYCLES. QSERIES #415959 5/21/45 BUL. 702-50 COL:405 1400 00 JUN. 45 AMP. Ø REV. 0		
		5/17/45 BUL. 702-25 COL:405 0010 00 JUN. 45 AMP. S# 379646 REV 8/14/43	CAU-29673 TDH SERIES			CONTACTOR, POWER 3P NORMALLY OPEN CONTACTS RATED 50 AMPS. 1 AUXILIARY NORMALLY CLOSED INTERLOCK. IMPREGNATED COIL RATED 220 VOLTS 60 CYCLES. QSERIES #385804 5/21/45 BUL. 702-50 COL:405 1200 00 JUN. 45 AMP. Ø REV. 11/6/41		
		ASSIGNED ISSUED	RELAY SINGLE WOUND. SLOW-ACTING. SINGLE ARM. 1 SPST. MAKE-BEFORE-BREAK CONTACT AND 1 SPDT BREAK-MAKE CONTACTS. CONTACTS RATED 3 AMPS. 110 WATTS. COIL RATED 77.0 MA 48V. NOMINAL. 13.0 MA. 8.0V MIN., 3.0 QCOIL:H-66645-172 5/21/45 ASA:H-77029-4 COL:972 1600 00 JUN. 45 GSEE ABOVE REV. 3/2/43			ASSIGNED ISSUED		
DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER

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NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
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CGE-29679 TDH SERIES
 RELAY, CONTROL
 3PDT CONTACT MATERIAL: FASALLOY #7 CAPABLE OF HANDLING LOADS ENCOUNTERED WHEN REVERSING A MOTOR RATED AT 1/3 H.P., 230 VOLTS 3 PHASE 60 CYCLES - APPROX. 10 AMPS. COIL RATED 48V DC NOMINALLY, 7300 TURNS #35E WIRE, 450 OHMS ± 10% DC RES.
 5/21/45 G35123 COL:405 2215 00
 JUN. 45 COIL: SP-226 REV. D8144

CGE-29679
 OPERATING DATA (NON-INDUCTIVE LOAD) -
 35V DC LOW/48V DC NORMAL/55V DC HIGH.

CGE-29683 TDH SERIES
 RELAY CONTROL:
 3 PDT NORMALLY CLOSED, BREAK BEFORE MAKE. CONTACTS CAPABLE OF WITHSTANDING CURRENTS ENCOUNTERED WHEN REVERSING A MOTOR RATED AT 1/3 HP 230V 3 PHASE, 60 CYCLES APP 10 AMPS. COIL RATED 48V DC NOMINAL, 53V MAX, 43V MIN ALL INTER-
 5/21/45 G-35506 COL-405000700
 JUN. 45 COIL:SP-226 REV D8145

CGE-29683
 MITTENT DUTY 150 OHMS ±10% DC RES.
 INTERMITTENT DUTY CYCLE -15 SEC ON 285 SEC OFF. OPERATE TIME-MIN 0.012 SEC AT MAX COIL VOLTAGE, MAX 0.022 SEC AT MIN.

CAU-29688 YR
 RELAY
 DPDT SINGLE BREAK. COIL RATED 110 VOLTS 47 TO 58 MA AC, 130 OHMS DC RESISTANCE. SIMILAR TO -29119 EXCEPT IS DPDT INSTEAD OF SPDT.

5/21/45 RA-61 CAT
 JUN. 45

CAY-29689 TRL-10
 CIRCUIT BREAKER
 3PST. CONTACTS RATED 600 VOLTS AC. (PIP-PIN) CURRENT 1 1/2 AMPS. COMBINATION THERMAL AND MAGNETIC TRIP.

5/25/45 821222032 CAY:CATALOG
 JUN. 45

CGX-29680 TDH SERIES
 RELAY, CONTROL:
 DPDT CONTACTS 1/4" DIAMETER FINE SILVER RATED 1000 WATTS. COIL RATED 48 VOLTS OPERATING CONTINUOUS DUTY. 675 OHMS DC RES. OPERATE TIME BETWEEN 0.010 AND 0.019 SECONDS WHEN THE COIL VOLTAGE IS 48 VOLTS EFFECTIVE 50-60 CYCLES, SINGLE
 5/21/45 JD-443R COL-405220900
 JUN. 45 CAT#12665 REV D10461

CGX-29680
 PHASE FULL WAVE RECTIFIED, UNFILTERED.

COL-29684 TDH SERIES
 RELAY ASSEMBLY:
 CONSISTS OF 2P NORMALLY CLOSED RATED 500 VOLTS 10 AMPS AND 1P NORMALLY OPEN, DOUBLE BREAK RATED 500 VOLTS, 10 AMP. 48 VOLT IMPREGNATED COIL, 680 OHMS DC RES.
 @COL-571051440 COIL:CAO TYPE 131
 7/41/45 @SEE ABOVE COL-5140-2
 JUN. 45 REV 09909

CHN-29685 TDH SERIES
 CIRCUIT BREAKER, TIME DELAY:
 TRIPLE POLE, FRONT CONNECTED, THREE OVERLOAD COILS, RATED 50 AMPS 230V AC. TIME DELAY TRIP ACCORDING TO STANDARD HEINEMANN ELECTRIC COMPANY CURVE "C".

5/21/45 0342-50 COL-250452330
 JUN. 45 REV. 0

CSD-29690 NM-16
 RELAY
 3PST NORMALLY OPEN. CONTACTS RATED 30 AMPS 110V AC, 4 AMPS 110V DC, 25 AMPS 220V AC, 0.75 AMPS 220V DC. COIL RATED 115V AC, 4200 TURNS #32 WIRE, 180 OHMS DC RES. SAME AS -29029 MINUS BASE. FOR GOLD CSD TYPE CX2366, PART OF TYPE 746-97
 5/26/45 8CXX CBM:C-94
 JUN. 45 COIL: "D" @

CSD-29690
 PANEL MTG.

CAU-29681 TDH SERIES
 RELAY:
 SINGLE WOUND, SLOW ACTING, DOUBLE ARM. LEFT SPRING ASSEMBLY 1 SPDT (BREAK-MAKE) CONTACT. RIGHT SPRING ASSEMBLY 1 SPDT (BREAK-MAKE) CONTACT. CONTACTS RATED 3 AMPS 110 WATTS. COIL RATED 75 AMPS 48V BASE:H-70800-10 COIL:H-66645-172
 5/21/45 @ SEE ABOVE COL-972130000
 JUN. 45 REV 9/14/43

CAU-29681
 NOMINAL, 20 MA AT 12.5V MIN, 3.0 MA AT 2.0V RELEASE 612 OHMS DC RES. OPERATING TIME AT 48/32/24/16/12.5 VOLTS 0.029/0.044/0.064/0.123/0.350 SECS.

CW-29686 PM
 RELAY:
 2 SECTIONS, TOP SECTION CONSISTS OF 2 MAKE SETS OF CONTACTS BOTTOM SECTION CONSISTS OF 2 BREAK SETS OF CONTACTS. RATED 1 AMP 56V DC MAX. COIL RATED 4.7 WATTS OR 109V DC FOR TEMP RISE TO 125°F MAX OPERATING, TEMP 225°F. CONSISTS OF
 5/25/45 D-161984-498 BA-107894-1
 JUN. 45 ISS 1

CW-29686
 18,800 TURNS OF 39E WIRE, 2500 OHMS DC RES. OPERATING CURRENT 0.0054 AMP DC FUNGUS RESISTANT.

CSD-29691 NM-16
 RELAY, THERMAL TIME DELAY
 SPDT CONTACTS RATED 0.1 AMP, 440V AC. COIL RATED 440V AC. HEATING ELEMENT - 350 OHMS, APPROX. CLOSING TIME 45 SEC. FOR PANEL MTG.

@PART OF CBM TYPE 746-97
 5/26/45 TD474A CBM:C-92
 JUN. 45 @SEE ABOVE

CSD-29692 WAA
 RELAY
 SPST. SPDT NORMALLY OPEN. SILVER CONTACTS RATED 15 AMPS, 115V AC. COIL RATED 115 VOLTS, 60 CYCLES, 4200 TURNS #32 WIRE, 180 OHMS DC RESISTANCE, 0.140 AMPS ARMATURE OPEN; 0.080 AMPS ARMATURE @PART OF CBM TYPE 746-87
 5/26/45 CX-2854 CBM:SKETCH
 JUN. 45 COIL: "D" @

CSD-29692
 CLOSED. FOR PANEL MOUNTING.

CSD-29682 TDH SERIES
 RELAY OVERLOAD:
 ONE CONTACT, DOUBLE BREAK NORMALLY OPEN. CONTACTS RATED 30 AMPS 115V AC, 6 AMPS 115V DC, 20 AMPS 230V AC 3 AMPS 230V DC. TRIP COIL 400 TO 800 MA DC ADJUSTABLE. RESET COIL 48V DC. TEST DATA RESET COIL 600 OHMS DC RES. 65 MA CURRENT COIL 21
 5/21/45 CXA-3283 COL-405340000
 JUN. 45 REV 12/16/41

CSD-29682
 OHMS DC RES 330 MA MIN, 920 MA MAX (BASICALLY SAME AS CSD TYPE CXC-2405 CSD'S NEW TYPE 56 HXX).

CW-29687 PM
 RELAY:
 2 SECTIONS, EACH CONSISTS OF 1 TRANSFER AND 2 MAKE SETS OF CONTACTS, RATED 1 AMP 56V DC MAX. COIL PRI CONSISTS OF 8700 TURNS #40E WIRE OF 1100 OHMS DC RES 0.0270 AMP DC OPERATING AND 0.012 AMPS/DC NON-OPERATING. SEC CONSISTS 3700
 5/25/45 D-161984-960 BA-107394-2
 JUN. 45 ISS 1

CW-29687
 TURNS #38E WIRE OF 1100 OHMS DC RES. 0.0285 AMPS DC OPERATING. EACH WINDING RATED 4.7 WATTS OR 72.0 VOLTS FOR TEMP RISE TO 125°F - MAX OPERATING TEMP 225°F. FUNGUS RESISTANT.

CSD-29693 WAB
 RELAY
 3PST NORMALLY OPEN FRONT CONTACTS, 1PST NORMALLY CLOSED BACK CONTACTS. CONTACTS RATED 5.0 AMPS AT 440V AC. COIL RATED 115V, 60 CYCLES, 4200 TURNS #32 WIRE, 180 OHMS DC RES. 0.140 AMPS ARMATURE OPEN, 0.080 AMPS ARMATURE CLOSED.
 5/26/45 CX-2367 CBM:C-73
 JUN. 45 COIL: "D" PART OF 746-53

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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Class 29—Electromagnetic Contact Devices

3.29-41

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
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CW-29694 QBF
 RELAY, PLUG-IN
 CONSISTS OF 2 SPRING PILE-UPS OF 6 CONTACTS EACH. EACH PILE-UP CONSISTS OF A DPDT SWITCH (CONTACTS 3, 6, 10, & 14 WILL NOT BREAK WHEN RELAY OPERATES). CONTACTS RATED 1 AMP, 48V DC MIN, 56V DC MAX. COIL OPERATING CURRENT 0.0155 AMP DC.
 5/26/45 D-163376 ESA-654209
 JUN. 45 ISS. 1

CW-29694
 NON-OPERATING CURRENT 0.013 AMP DC; 2610 OHMS MIN TO 3190 OHMS MAX DC RESISTANCE.

CW-29695 QBF
 RELAY
 HAS 2 SETS OF 4 TRANSFER CONTACTS, RATED 1 1/2 AMPS, 150V OFF GROUND, CARRYING ONLY. AND ON A SHORT PULSE BASIS, WINDING HAS RES. OF 580 OHMS. OPERATING CURRENT 0.032 AMP DC. HAS 26 GOLD PLATED PRONG TYPE TERMINALS, ADAPTED FOR INSERTION IN A NAVY TYPE -49753 JACK.
 5/26/45 D-166885 BL-105903
 JUN. 45 ISS. 2

CW-29695
 TION IN A NAVY TYPE -49753 JACK.

CSD-29696 MAB
 RELAY
 SPST NORMALLY OPEN CONTACTS RATED 5.0 AMPS AT 440V AC. COIL RATED 115 VOLTS, 60 CYCLES, 4200 TURNS #32 WIRE, 180 OHMS DC RES, 0.140 AMPS ARMATURE OPEN, 0.080 AMPS ARMATURE CLOSED.
 *CSD: P-3638A, PART OF CBM TYPE 746-53
 5/26/45 CX-2368 CBM:C-93
 JUN. 45 COIL: "0" *SEE ABOVE

CG-29697 QCS
 RELAY
 DPDT, 2 NORMALLY OPEN CONTACTS AND 2 NORMALLY CLOSED, CONTACTS RATED 10 AMPS, 220V AC. COIL RATED 115 VOLTS 60 CYCLES; 4200 TURNS 0.005 WIRE, DC RESISTANCE 390 OHMS.
 5/28/45 CR2790-E105A2 CG:K-8273011
 JUN. 45

CG-29698 QCS
 RELAY
 DPDT, 2 NORMALLY OPEN, 2 NORMALLY CLOSED CONTACTS RATED 10 AMPS AT 110 OR 120V AC. COIL RATED 110V 60 CYCLES, 0.048 AMPS, 6470 TURNS 0.004" WIRE, 810 OHMS DC RESISTANCE.
 5/28/45 CR2820 CG:K-4954936
 JUN. 45 1713A201P2 REV. 5

CG-29699 QCS
 RELAY, TIME DELAY
 DPDT, 2 CONTACTS NORMALLY OPEN, 2 NORMALLY CLOSED, CONTACTS RATED 10 AMPS, AT 110 OR 120V AC. COIL RATED 110V 60 CYCLES 0.048 AMPS, 6470 TURNS 0.004" WIRE.
 *CG:K-8620793 REV. 2. (FOR DIMENSIONS ONLY)
 5/28/45 CR-2820 CG:DL-4984160
 JUN. 45 1753G2D *SEE ABOVE

CG-29699
 DC RESISTANCE 810 OHMS. TIME DELAY - 10 TO 20 SECONDS.

CRY-29700 CAN-55181
 RELAY, TIME DELAY
 DPDT, 1 BREAK PER CIRCUIT, #18 GA PALLADIUM CONTACTS RATED 3 AMPS, 150 WATTS, COIL RATED 120 VOLTS, 0.024 AMPS, 25,600 TURNS #40 E.C. WIRE WITH 5000 OHMS RESISTANCE. TIME DELAY - 20 MILLISECOND MAX.
 5/29/45 TYPE C CAN:802743
 JUN. 45 CAT #A-22963 ALT. 1

CSD-29701 SF
 RELAY, TIME DELAY
 CONTACTS RATED 6 AMPS, 110V AC. COIL RATED 115V AC, 8500 TURNS #41 WIRE DC RESISTANCE 2150 OHMS. WITH RELAY CLOSED DC RESISTANCE IS 4150 OHMS DUE TO USE OF 2000 OHM RESISTOR IN SERIES WITH COIL.
 GOLD CSD TYPE TDA-327A, CBM 746-234
 5/29/45 PTAH-5 CBM:C-68
 JUN. 45 COIL: 85A 8 CSD:7512

CSD-29701
 TIME DELAY - 1 1/4-1 1/2 MIN.

CSQ-29702 QBF, QJA
 CIRCUIT BREAKER
 MANUALLY RESET BY PUSH-BUTTON. THERMAL TYPE WITH 2 SCREW TYPE TERMINALS. AMBIENT TEMP. 77°F. RATED CURRENT 2 AMPS. TRIPS AT 125% OR LESS OF RATED CURRENT IN SAME AMBIENT. FOR USE WITH 30V DC AND UNDER. OR 110 AND 120 VOLTS AC.
 5/29/45 PSM-2L CW:3A-10198-6
 JUN. 45 ISS. 4

CSD-29703 WAA
 RELAY, TIME DELAY
 SPDT CONTACTS CLOSED TO RIGHT, CONTACTS RATED 2 AMPS, 115V AC. HEATER RATED 115 VOLTS, 60 CYCLES, 320 OHMS DC RES, #37 NICHROME WIRE, USES 300 OHM RESISTOR IN SERIES WITH HEATER COIL. TIME DELAY - 4 MINUTES.
 5/30/45 TDB-474 CBM:C-90
 JUN. 45 CBM TYPE 746-446

CSD-29704 WDA 55RE23J1448
 RELAY:
 3PDT CONTACTS RATED 6 AMPS 110V AC, 1 AMP, 115V DC. COIL RATED 110 VOLTS 60 CYCLES, 5000 TURNS #38 WIRE, 605 OHMS DC RESISTANCE.
 5/30/45 CXF-1396
 JUN. 45 CBM-746-126

CCQ-29705 WFA
 RELAY:
 6PDT CONTACTS SILVER PLATED RATED 5 AMP AT 230V DC. COIL RATED 99.2V DC, 0.0353 MA, 3.5 WATTS, 14340 TURNS #39 WIRE 2810 OHMS DC RESISTANCE.
 *CBM-746-602
 5/30/45 BN-18D39 CCQ-2300
 JUN. 45 COIL#39 8

CCQ-29706 SO-1
 RELAY STARTING:
 3PDT SILVER CONTACTS RATED 5 AMPS 115V DC. COIL RATED 4.8V DC MIN TO 7.2V DC MAX, 6.0V DC NORMAL, 14.2 OHMS +10% AT 25°C DC RESISTANCE, 1100 TURNS #29 WIRE. AMBIENT TEMP RANGE -35°C TO +65°C. CON-
 *CRP-71-5026 REV 0 CCQ-2905 ISS 4
 5/31/45 8099-29 *SEE ABOVE
 JUN. 45

CCQ-29706
 TACTS REMAIN CLOSED AT ANY VOLTAGE DOWN TO 2.7V DC.

CCQ-29707 SO
 RELAY:
 DPST NORMALLY OPEN, CONTACTS RATED 15 AMPS AT 12V DC OR AT 24V AC, 15 AMPS AT 110V AC. COIL RATED 12V DC, 0.190 AMPS 70 OHMS DC RES, 2.5 WATTS, 2300 TURNS #32 WIRE.
 5/31/45 804032 CCQ-24862
 JUN. 45 CRP-71-5045

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NAVSHIPS 900,109

