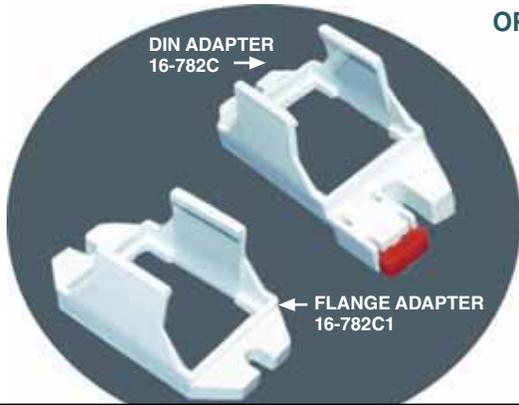


782 - 2 & 4 POLE "ICE CUBE" CONTROL RELAY



DPDT & 4PDT, 1, 3, 5 & 10 AMPS

OPTIONAL ADAPTERS
ORDERED SEPARATELY



Mating Sockets
70-461-1, SCREW/DIN
70-378-1: SOLDER
70-379-1: PRINTED CIRCUIT
See section 7

STANDARD PART NUMBERS				COIL MEASURED @ 25 °C	
FULL FEATURED	PLAIN COVER WITH FLAG	HERMETICALLY SEALED	FULL FEATURED	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
4PDT				DPDT	
SOLDER/PLUG -IN, BIFURCATED CONTACTS 3 AMP					
	DUAL MARKED				
	NEW PART NUMBER	SUPERCEDES			
782XDX3M4L-24A	782XDX3C-12A	W78ATCSX-2		12 VAC, 50/60 Hz	46 Ω
	782XDX3C-24A	W78ATCSX-3	782XBX3M4L-24A	24 VAC, 50/60 Hz	180 Ω
782XDX3M4L-120A	782XDX3C-120A	W78ATCSX-5	782XBX3M4L-120A	110/120 VAC, 50/60 Hz	4,430 Ω
782XDX3M4L-220/230A	782XDX3C-220/230A		782XBX3M4L-220/230A	220/230 VAC, 50/60 Hz	15,000 Ω
782XDX3M4L-240A	782XDX3C-240A	W78ATCSX-6	782XBX3M4L-240A	240 VAC, 50/60 Hz	15,700 Ω
	782XDX3C-6D	W78TCSX-1		6 VDC	
782XDX3M4L-12D	782XDX3C-12D	W78TCSX-2	782XBX3M4L-12D	12 VDC	160 Ω
782XDX3M4L-24D	782XDX3C-24D	W78TCSX-3	782XBX3M4L-24D	24 VDC	650 Ω
782XDX3M4L-110D	782XDX3C-110D	W78TCSX-5	782XBX3M4L-110D	110/125 VDC	11,000 Ω
SOLDER/PLUG -IN, CONTACTS 3 AMP					
	782XDX1C-12A	W78ACXSX-2		12 VAC, 50/60 Hz	46 Ω
782XDX1M4L-24A	782XDX1C-24A	W78ACXSX-3	782XDXH10-24A	24 VAC, 50/60 Hz	180 Ω
782XDX1M4L-120A	782XDX1C-120A	W78ACXSX-5	782XDXH10-120A	110/120 VAC, 50/60 Hz	4,430 Ω
782XDX1M4L-220/230A	782XDX1C-220/230A			220/230 VAC, 50/60 Hz	15,000 Ω
782XDX1M4L-240A	782XDX1C-240A	W78ACXSX-6		240 VAC, 50/60 Hz	15,700 Ω
	782XDX1C-6D	W78CSX-1		6 VDC	
782XDX1M4L-12D	782XDX1C-12D	W78CSX-2	782XDXH10-12D	12 VDC	160 Ω
782XDX1M4L-24D	782XDX1C-24D	W78CSX-3	782XDXH10-24D	24 VDC	650 Ω
782XDX1M4L-110D	782XDX1C-110D	W78CSX-6	782XDXH10-110D	110/125 VDC	11,000 Ω
SOLDER/PLUG -IN, CONTACTS 10 AMP					
782XDX2M4L-24A	782XDX2C-24A	W78KACXSX-15		24 VAC, 50/60 Hz	180 Ω
782XDX2M4L-120A	782XDX2C-120A	W78KACXSX-17	782XDXH21-120A	110/120 VAC, 50/60 Hz	4,430 Ω
782XDX2M4L-220/230A	782XDX2C-220/230A			220/230 VAC, 50/60 Hz	15,000 Ω
782XDX2M4L-240A	782XDX2C-240A	W78KACXSX-18		240 VAC, 50/60 Hz	15,700 Ω
782XDX2M4L-12D	782XDX2C-12D	W78KCSX-12	782XDXH21-12D	12 VDC	160 Ω
782XDX2M4L-24D	782XDX2C-24D	W78KCSX-13	782XDXH21-24D	24 VDC	650 Ω
782XDX2M4L-110D	782XDX2C-110D			110/125 VDC	11,000 Ω
PRINTED CIRCUIT BIFURCATED CONTACTS 3 AMP					
	782XDX3CT-24A	W78APCX-3		24 VAC, 50/60 Hz	180 Ω
	782XDX3CT-120A	W78APCX-5		110/120 VAC, 50/60 Hz	4430 Ω
	782XDX3CT-12D	W78PCX-2		12 VDC	15700 Ω
	782XDX3CT-24D	W78PCX-3		24 VDC	160 Ω
	782XDX3CT-110D	W78PCX-6		110/125 VDC	11,000 Ω

NOTE: CLASS 782C IS AN ENHANCED VERSION OF THE 78, IT HAS SUPERIOR RATINGS, A FLAG INDICATOR, & DISPLAYS BOTH PART NUMBERS.

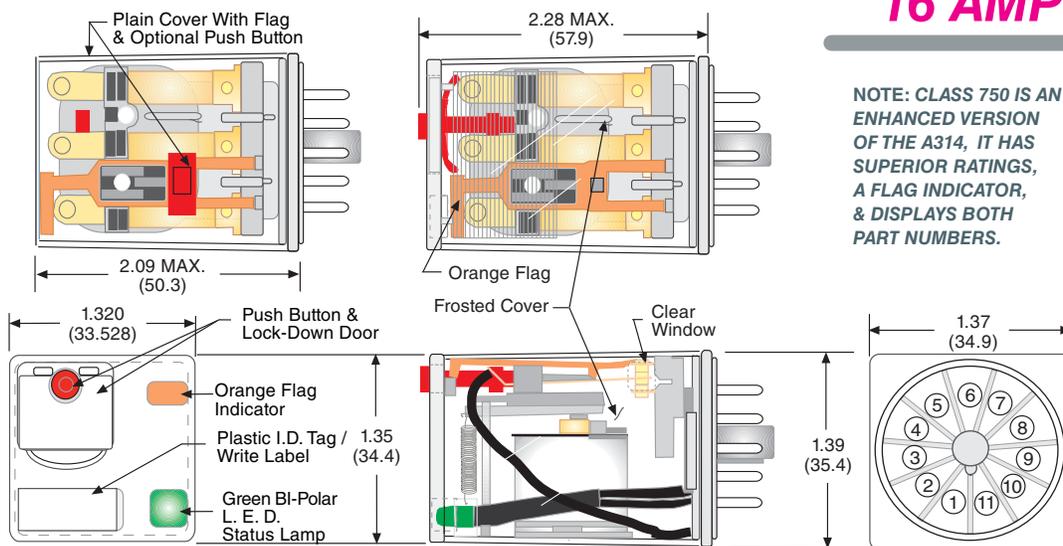
750 OCTAL STYLE POWER RELAY



DPDT & 3PDT 16 AMPS

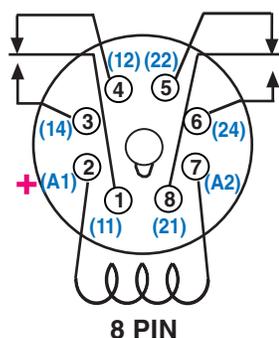
OUTLINE DIMENSIONS

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).

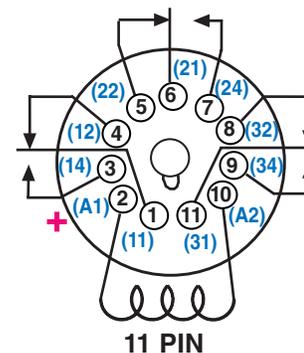


NOTE: CLASS 750 IS AN ENHANCED VERSION OF THE A314, IT HAS SUPERIOR RATINGS, A FLAG INDICATOR, & DISPLAYS BOTH PART NUMBERS.

WIRING DIAGRAM (VIEWED FROM PIN END)



8 PIN



11 PIN

ALTERNATE NEMA OR IEC () NUMBERS VIEWED FROM PIN SIDE

ORDERING CODE

750 **XBX** **M4L** **-120A**

- CLASS:** 750
- CONTACT CONFIGURATION:** DPDT: XBX, 3PDT: XCX
- OPTIONAL PLAIN COVER:** CODE C
- OPTIONS:** MAGNETIC BLOWOUT: CODE 69
- FULL FEATURED VERSION:** PUSH BUTTON & LOCK DOWN DOOR: CODE M4
BI - POLAR L.E.D. STATUS LAMP: CODE L
- OPTIONAL FULL FEATURED DELETION:** PUSH BUTTON WITHOUT LOCK-DOWN DOOR: CODE M.
(CODES 69, L, OR M ALSO AVAILABLE ON CLEAR COVER VERSIONS)
- OPTIONAL PLAIN COVER FEATURES:** PUSH BUTTON WITHOUT LOCK-DOWN DOOR: CODE M
POLARIZED L.E.D. STATUS LAMP: CODE L (OBSERVE POLARITY+)
- COIL VOLTAGE:** 6, 12, 24, 120, 220 / 240 ADD "A" FOR AC COILS
6, 12, 24, 48, 110 ADD "D" FOR DC COILS



Mating Sockets

70-750D8-1, 70-750D11-1,
70-464-1, 70-465-1, 70-750E8-1, 70-750E11-1
70-750EL/SL8-1, 70-750EL/SL11-1: SCREW/DIN
70-169-1, 70-170-1: SCREW/PANEL

See section 7

STANDARD PART NUMBERS			COIL MEASURED @ 25 °C	
FULL FEATURED	PLAIN COVER WITH FLAG	CONTACT CONFIGURATION	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE(OHMS)
AC OPERATED - 8 PIN OCTAL, 16 AMP				
DUAL MARKED				
	NEW PART NUMBER	SUPERCEDES		
750XBXM4L-24A	750XBXC-24A	A314XBX48P-24A	24 VAC, 50/60Hz	72 Ω
750XBXM4L-120A	750XBXC-120A	A314XBX48P-120A	110/120 VAC, 50/60Hz	1,700 Ω
750XBXM4L-220/240A	750XBXC-220/240A	A314XBX48P-220/240A	220/240 VAC, 50/60Hz	7,200 Ω
DC OPERATED - 8 PIN OCTAL, 16 AMP				
750XBXM4L-12D	750XBXC-12D	A314XBX48P-12D	12 VDC	120 Ω
750XBXM4L-24D	750XBXC-24D	A314XBX48P-24D	24 VDC	470 Ω
750XBXM4L-110D	750XBXC-110D	A314XBX48P-110D	110/125 VDC	10,000 Ω
AC OPERATED - 11 PIN OCTAL, 16 AMP				
750XCXM4L-24A	750XCXC-24A	A314XCX48P-24A	24 VAC, 50/60Hz	72 Ω
750XCXM4L-120A	750XCXC-120A	A314XCX48P-120A	110/120 VAC, 50/60Hz	1,700 Ω
750XCXM4L-220/240A	750XCXC-220/240A	A314XCX48P-220/240A	220/240 VAC, 50/60Hz	7,200 Ω
DC OPERATED - 11 PIN OCTAL, 16 AMP				
750XCXM4L-12D	750XCXC-12D	A314XCX48P-12D	12 VDC	120 Ω
750XCXM4L-24D	750XCXC-24D	A314XCX48P-24D	24 VDC	470 Ω
750XCXM4L-110D	750XCXC-110D	A314XCX48P-110D	110/125 VDC	10,000 Ω

70S2 SERIES SOLID STATE "V" STYLE RELAY



DC/AC, SPST-N.O., 3 AMPS

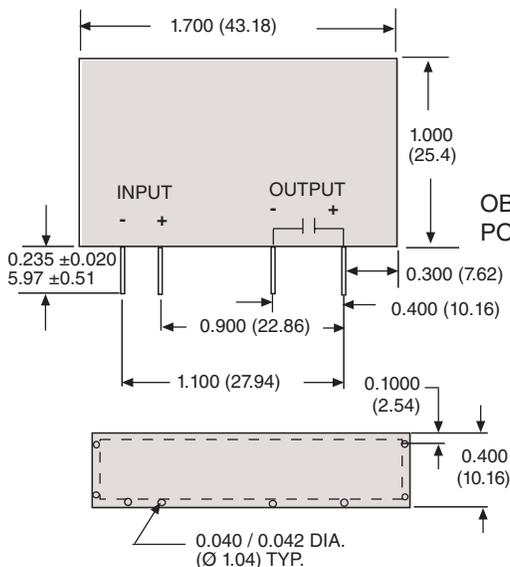


GENERAL SPECIFICATIONS (@ 25°C)

INPUT CHARACTERISTICS	70S2-04-D	70S2-05-D	70S2-04-B	70S2-05-B	70S2-04-C	70S2-05-C	70S2-01-A	70S2-02-A
Style:								
Control Voltage Range:	3 - 32 VDC	6 - 32 VDC	3 - 32 VDC	6 - 32 VDC	3 - 32 VDC	6 - 32 VDC	3 - 15 VDC	9 - 30 VDC
Typical Input Current:	1.0 -19 mA	1.0 -6.0 mA	1.0 -19 mA	1.0 -6.0 mA	1.0 -19 mA	1.0 -6.0 mA	5 -40mA	5 -17 mA
Must Release Voltage:	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC
Max. Reverse Control Voltage:	3 VDC	3 VDC	3 VDC	3 VDC	3 VDC	3 VDC	3 VDC	3 VDC
OUTPUT CHARACTERISTICS								
Load Voltage Range:	8 - 50 VAC	8 - 50 VAC	24 - 140 VAC	24 - 140 VAC	24 - 280VAC	24 - 280 VAC	3 - 60 VDC	3 - 60 VDC
Rated Load Current :	3 Amps	3 Amps	3 Amps	3 Amps	3 Amps	3 Amps	3 Amps	3 Amps
Maximum off-State Voltage dv/dt:	300 V/u Sec Typ							
Minimum Load Current:	75 mA	75 mA	75 mA	75 mA	75 mA	75 mA	100 mA	100 mA
Non-Repetitive Surge Current (1 Cycle):	60 Amps Peak @ 25 C						5 Amps/1 Sec.	
Maximum Off State Leakage Current (Rms):	3 mA	3 mA	6 mA	6 mA	6 mA	6 mA	10 uA	10 uA
Typical On-State Voltage Drop(Rms):	1.6	1.6	1.6	1.6	1.6	1.6	1.2 VDC	1.2 VDC
Minimum Peak Blocking Voltage:	200 V	200 V	400 V	400 V	600 V	600 V	105 VDC	105 VDC
Operating Frequency Range:	25 to 70 Hz	25 to 70 Hz	25 to 70 Hz	25 to 70 Hz	25 to 70 Hz	25 to 70 Hz	DC	DC
Maximum Turn - On Time:	8.3 mS	8.3 mS	8.3 mS	8.3 mS	8.3 mS	8.3 mS	75 mS	75 mS
Maximum Turn - Off Time:	8.3 mS	8.3 mS	8.3 mS	8.3 mS	8.3 mS	8.3 mS	500 mS	500 mS
MISCELLANEOUS CHARACTERISTICS								
Dielectric Strength (Input/Output):	3750 V rms.	3750 V rms.	3750 V rms.	3750 V rms.	3750 V rms.	3750 V rms.	3750 V rms.	3750 V rms.
Insulation Resistance:	100 megohms minimum @ 500 VDC							
Operating Temperature Range:	-40°C to +100°C							
Storage Temperature Range:	-40°C to +125°C							
Weight:	25 grams approx.							

OUTLINE DIMENSIONS

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).

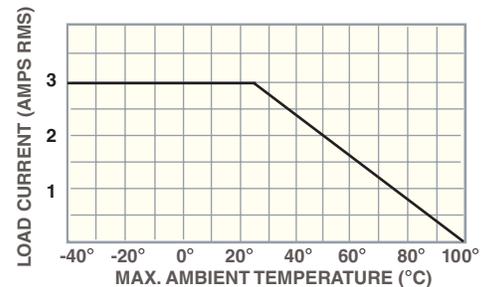


OBSERVE POLARITY



STYLE V

Figure 1: Maximum Continuous Current vs. Ambient Temperature



STANDARD PART NUMBERS	LOAD VOLTAGE RANGE	RATED LOAD CURRENT
*70S2-04-D-03-V	8 - 50 VAC	3 AMPS
*70S2-05-D-03-V	8 - 50 VAC	3 AMPS
*70S2-04-B-03-V	24 - 140 VAC	3 AMPS
*70S2-05-B-03-V	24 - 140 VAC	3 AMPS
*70S2-04-C-03-V	24 - 280 VAC	3 AMPS
*70S2-05-C-03-V	24 - 280 VAC	3 AMPS
70S2-01-A-03-V	3 - 60 VDC	3 AMPS
70S2-02-A-03-V	3 - 60 VDC	3 AMPS

* TUV

CONSULT FACTORY FOR OTHER CONFIGURATIONS.

70S2 SERIES SOLID STATE "N" & "S" STYLE RELAYS



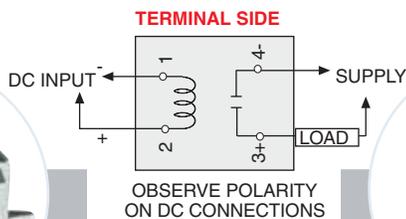
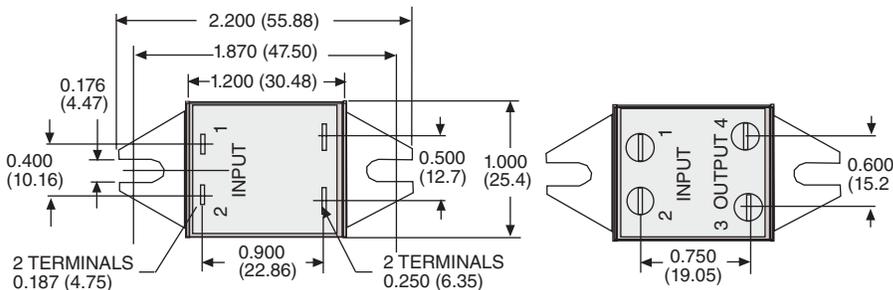
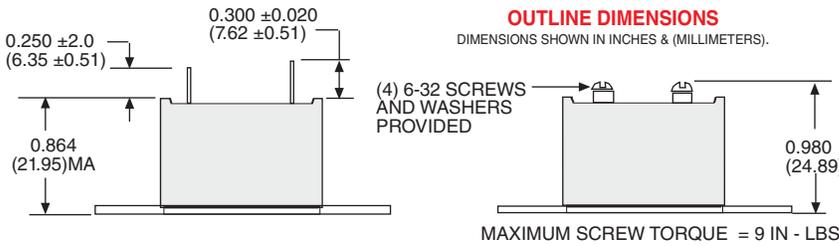
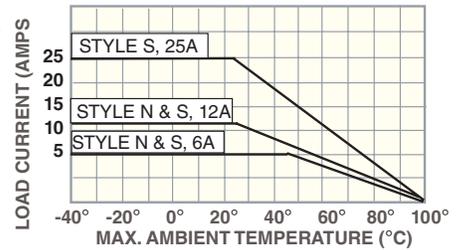
DC/AC, SPST-N.O. 5, 6, 12 & 25 AMPS



GENERAL SPECIFICATIONS (@ 25°C)

INPUT CHARACTERISTICS	70S2-04-B	70S2-05-B	70S2-04-C	70S2-05-C	70S2-03-B	70S2-03-C	70S2-01-A	70S2-02-A
Style:	70S2-04-B	70S2-05-B	70S2-04-C	70S2-05-C	70S2-03-B	70S2-03-C	70S2-01-A	70S2-02-A
Control Voltage Range:	3 - 30 VDC	6 - 30 VDC	3 - 30 VDC	6 - 30 VDC	3 - 30 VDC	3 - 30 VDC	3 - 15 VDC	9 - 30 VDC
Typical Input Current:	7.0 -16 mA	6.0 -10 mA	7.0 -16 mA	6.0 -10 mA	7.0 -16 mA	7.0 -16 mA	5 -40 mA	5 -17 mA
Must Release Voltage:	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC	1.0 VDC
Maximum. Reverse Control Voltage:	3 VDC	3 VDC	3 VDC	3 VDC	3 VDC	3 VDC	3 VDC	3 VDC
OUTPUT CHARACTERISTICS								
Load Voltage Range:	24 - 140 VAC	24 - 140 VAC	24 - 280 VAC	24 - 280 VAC	24 - 140 VAC	24 - 280 VAC	3 - 60 VDC	3 - 60 VDC
Rated Load Current :	6 Amp 12 Amp	6 Amp 12 Amp	6 Amp 12 Amp	6 Amp 12 Amp	25 Amps	25 Amps	5 Amps	5 Amps
Maximum off-State Voltage dv/dt:	300 V/u Sec Typ							
Minimum Load Current:	75 mA 100 mA	75 mA 100 mA	75 mA 100 mA	75 mA 100 mA	100 mA	100 mA	100 mA	100 mA
Non-Repetitive Surge Current (1 Cycle):	60 Amp 150 Amp	60 Amp 150 Amp	60 Amp 150 Amp	60 Amp 150 Amp	300 Amps	300 Amps	7 Amps/sec	10 7 Amps/sec
Maximum Off State Leakage Current (Rms):	6 mA	6 mA	6 mA	6 mA	6 mA	6 mA	uA	10 uA
Typical On-State Voltage Drop(Rms):	1.6 V	1.6 V	1.6 V	1.6 V	1.7 V	1.7 V	1.85 VDC	1.85 VDC
Minimum Peak Blocking Voltage:	400 V	400 V	600 V	600 V	400 V	600 V	105 VDC	105 VDC
Operating Frequency Range:	25 to 70 Hz	25 to 70 Hz	25 to 70 Hz	25 to 70 Hz	25 to 70 Hz	25 to 70 Hz	DC	DC
Maximum Turn - On Time:	8.3 mS	8.3 mS	8.3 mS	8.3 mS	8.3 mS	8.3 mS	75 mS	75 mS
Maximum Turn - Off Time:	8.3 mS	8.3 mS	8.3 mS	8.3 mS	8.3 mS	8.3 mS	750 mS	750 mS
MISCELLANEOUS CHARACTERISTICS								
Dielectric Strength (Input/Output/Base):	3000 V rms.	3000 V rms.	3000 V rms.	3000 V rms.	3000 V rms.	3000 V rms.	2500 V rms.	2500 V rms.
Insulation Resistance:	100 megohms minimum @ 500 VDC							
Operating Temperature Range:	-40°C to +100°C							
Storage Temperature Range:	-40°C to +125°C							
Weight:	47 grams approx.							

Figure 1: Maximum Continuous Current vs. Ambient Temperature



STYLE N



STYLE S

STANDARD PART NUMBERS	LOAD VOLTAGE RANGE	RATED LOAD CURRENT
70S2-04-B-06-N	24 - 140 VAC	6 AMPS
70S2-05-B-06-N	24 - 140 VAC	6 AMPS
70S2-04-B-12-N	24 - 140 VAC	12 AMPS
70S2-05-B-12-N	24 - 140 VAC	12 AMPS
70S2-04-C-06-N	24 - 280 VAC	6 AMPS
70S2-05-C-06-N	24 - 280 VAC	6 AMPS
70S2-04-C-12-N	24 - 280 VAC	12 AMPS
70S2-05-C-12-N	24 - 280 VAC	12 AMPS
70S2-04-B-06-S	24 - 140 VAC	6 AMPS
70S2-05-B-06-S	24 - 140 VAC	6 AMPS
70S2-04-B-12-S	24 - 140 VAC	12 AMPS
70S2-05-B-12-S	24 - 140 VAC	12 AMPS
70S2-03-B-25-S	24 - 140 VAC	25 AMPS
70S2-04-C-06-S	24 - 280 VAC	6 AMPS
70S2-05-C-06-S	24 - 280 VAC	6 AMPS
70S2-04-C-12-S	24 - 280 VAC	12 AMPS
70S2-05-C-12-S	24 - 280 VAC	12 AMPS
70S2-03-C-25-S	24 - 280 VAC	25 AMPS
70S2-01-A-05-N	3 - 60 VDC	5 AMPS
70S2-01-A-05-S	3 - 60 VDC	5 AMPS
70S2-02-A-05-S	3 - 60 VDC	5 AMPS

CONSULT FACTORY FOR OTHER CONFIGURATIONS.
S & N STYLE ARE NOT INTENDED FOR PC BOARD MOUNTING CONSULT FACTORY