



UL Recognized
File No. E13224



UL Listed industrial
control equipment 225G
when used with
27390D socket

FEATURES

INDUSTRIAL PLUG-IN CONSTRUCTION

2 COILS WITH OPERATE COIL DOMINANT

MULTIPLE CONTACT ARRANGEMENTS
AND AVAILABLE OPTIONS

GOLD DIFFUSED
CONTACTS STANDARD

BENEFITS

ULTIMATE RUGGEDNESS & RELIABILITY.

VERSATILE OPERATION

CAN BE PURCHASED EXACTLY
AS NEEDED

WILL NOT TARNISH, LOW CONTACT
RESISTANCE FOR THE LIFE OF THE RELAY

GENERAL SPECIFICATIONS (@ 25°C)

	UNITS	
COIL		
Pull-in Voltage AC (50/60 Hz):≤	% of nominal	85
Pull-in Voltage DC:≤	% of nominal	80
Dropout Voltage AC (50/60 Hz):≥	% of nominal	Not applicable
Dropout Voltage DC:≥	% of nominal	Not applicable
Maximum Voltage:	% of nominal	110
Resistance Tolerance:	% ±	10
Coil Power AC (50/60 Hz):	VA	5
Coil Power DC:	W	2
Insulation System		
Per UL Standard 1446:		Class B (130°C)
Duty:		Continuous
CONTACTS		
Contact Material:		Silver alloy, gold flashed
Contact Rating AC Amperes (AC1):	A	10
Contact Rating AC Voltage:	V	120
Contact Rating DC Amperes (DC1):	A	10
Contact Rating DC Voltage:	V	24
Horse Power (AC):	HP	None
Horse Power (AC):	HP	None
Pilot Duty (60 Hz):		Not applicable
Minimum Recommended Load:	ma	100 @ 5 VDC or 0.5 W
TIMING		
Operate Time:	ms	25
Release Time:	ms	20
DIELECTRIC STRENGTH		
Coil to Contacts:	V rms	1500
Across Open Contacts:	V rms	1500
Pole to Pole:	V rms	1500
Contacts to Frame:	V rms	1500
Insulation Resistance:	megohms minimum @VDC	1000 @ 500
TEMPERATURE		
Operating, AC Lower:	°C	-10
Operating, AC Upper:	°C	+60
Operating, DC Lower:	°C	-10
Operating, DC Upper:	°C	+60
Storage, Lower:	°C	-40
Storage, Upper:	°C	+105
LIFE EXPECTANCY		
Electrical @ Rated Load (AC1):	operations	100,000
Mechanical @ no Load :	operations	10,000,000
MISCELLANEOUS		
Operating Position:		Any
Insulation Material:		Molded plastic
Enclosure Material:		Clear Polycarbonate
Cover Protection Category:	IP	50
Weight:	grams	215

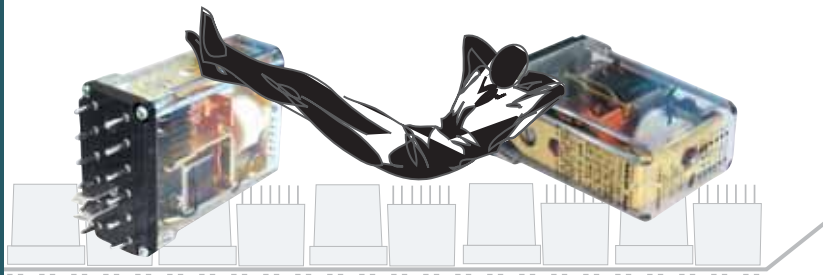
UL CONTACT LOAD RATINGS TABLE

VOLTS	MAKE	CARRY	BREAK	
			RESISTIVE	INDUCTIVE
24 VDC	30 A	10 A	10 A	10 A
120 VAC	30 A	10 A	10 A	3 A
240 VAC	30 A	10 A	5 A	1 A
28 VDC	30 A	10 A	10 A	3 A
125 VDC	30 A	10 A	0.5 A	0.1 A
**FOR VERSIONS WITH SUFFIX "69" PERMANENT MAGNET BLOWOUTS				
125 VDC SM*	30 A	10 A	1.5 A	0.5 A
125 VDC DM	30 A	10 A	4 A	1.5 A
250 VDC SM	30 A	10 A	0.5 A	150 A
250 VDC DM	30 A	10 A	1.5 A	0.5 A
**FOR VERSIONS WITH SUFFIX "33" BIFURCATED CONTACTS				
120 VAC	1.5 A	5 A	5 A	2 A
240 VAC	7.5 A	2.5 A	2.5 A	1 A

** RELAYS WITH CODE 69 FEATURE (CHECK WITH FACTORY FOR UL & CSA LISTING)

* SM = SINGLE MAKE DM = DOUBLE MAKE

THE CLASS B255 IS A TWO COIL LATCHING VERSION OF THE GENERAL PURPOSE TYPE 219 RELAY. WHEN THE OPERATE COIL IS MOMENTARILY ENERGIZED, THE RELAY MECHANICALLY LATCHES IN THE ENERGIZED POSITION AND REMAINS IN THE ENERGIZED POSITION WITH THE POWER REMOVED FROM THE COIL. THE SECOND COIL WHEN MOMENTARILY ENERGIZED, PROVIDES ELECTRICAL RESET OF THE CONTACTS. ALL CONTACTS OPERATE FROM A COMMON ARMATURE TO PREVENT CONTACT OVERLAPPING. COILS ARE RATED FOR CONTINUOUS DUTY. NUCLEAR QUALIFIED VERSIONS ARE AVAILABLE. CONTACT THE FACTORY FOR DETAILS.



B255 INDUSTRIAL PLUG - IN LATCHING RELAY



UP TO 3PDT, 10 AMPS

WIRING DIAGRAM
(VIEWED FROM PIN END)

COIL SPECIFICATIONS @ 25°C

AC COIL DATA (50/60 Hz)

NOMINAL VOLTAGE	RESET COIL (3 VA)		OPERATE COIL (5 VA)	
	RESISTANCE OHMS $\pm 10\%$	COIL CURRENT (mA)	RESISTANCE OHMS $\pm 10\%$	COIL CURRENT (mA)
6	3.0	840	1.10	800
12	14.5	256	4.20	410
24	52.0	150	15.5	200
120	1450	26.5	540	45.0
240	5000	4.8	1815	13.2

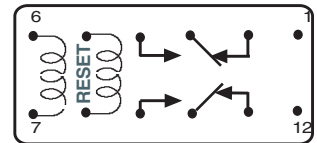
Current inrush on all AC coils is less than twice the listed milliamperes ratings as shown in the AC coil data table. Currents shown in table measured at 60 Hz.

COIL SPECIFICATIONS @ 25°C

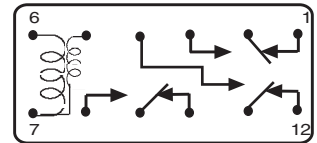
DC COIL DATA

NOMINAL VOLTAGE	RESET COIL (1.4 W)		OPERATE COIL (1.8 W)	
	RESISTANCE OHMS $\pm 10\%$	COIL CURRENT (mA)	RESISTANCE OHMS $\pm 10\%$	COIL CURRENT (mA)
6	21.0	286	15.5	385
12	85.0	141	63.5	189
24	300	80	250	96.0
115/125	8000	14.4	6200	20.0

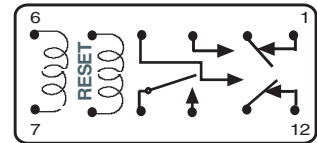
DC relays, 1.8 Watts
(2.5 W @ 125VDC)



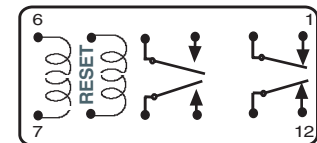
B255XBXP
(DPDT)



B255XCXP
(3PDT)



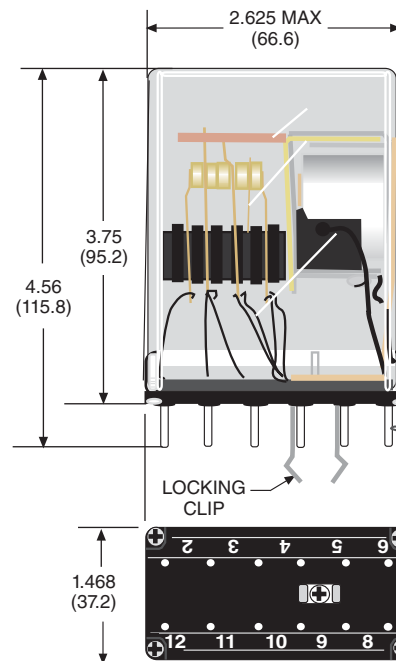
B255ABXP
(DPDT + 1 N.O.)



B255BXP
(2 N.O. + 2 N.C.)



OUTLINE DIMENSIONS DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



ORDERING CODE

B255 **XCX** **P** **LM** **-120A**

CLASS:

B255 2 COIL LATCH PLUG-IN

CONTACT ARRANGEMENTS:

XB: DPDT
XC: 3PDT
AB: SPST-NO & 2 FORM C
BX: DPST-NO & 2 FORM B

STANDARD FEATURES:

POLYCARBONATE COVER: CODE "P"

OPTIONAL FEATURES:

INDICATOR LAMP ACROSS BOTH COILS: CODE "L"
MANUAL ACTUATOR: CODE "M"
LIGHT & ACTUATOR: CODE "LM"
PERM. MAGNET BLOWOUT: CODE "69"
BIFURCATED CONTACTS: CODE "33"
DC COIL SUPPRESSION: CODE "V"
AC COIL SUPPRESSION: CODE "V1"

COIL VOLTAGE:

6, 12, 24, 120, 240 ADD "A" FOR AC COILS
6, 12, 24, 115-125 ADD "D" FOR DC COILS

COIL MEASURED @ 25 °C

STANDARD PART NUMBERS	CONTACT CONFIGURATION	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
AC OPERATED, 10 AMP			
B255BXP-120A	2 N.O. + 2 N.C.	120 VAC	540/1450 Ω
B255XBXP-120A	DPDT	120 VAC	540/1450 Ω
B255XCXP-120A	3PDT	120 VAC	540/1450 Ω
DC OPERATED, DUAL COIL, 10 AMP			
B255BXP-24D	DPDT	24 VDC	250/300 Ω

Mating Socket
27390D
See section 7