



The ARP Series is used in systems where equal run time for two motors is desirable. The selector switch allows selection of alternation of either load for continuous operation. LED's indicate the status of the output relay. This versatile series may be front panel mounted (BZ1 accessory required) or 35 mm DIN rail mounted with an accessory socket.

For more information see:
Appendix B, page 167, Figure 31 for dimensional drawing.
Appendix C, 170, Figure 29 for connection diagram.

Operation

Alternating: When the rotary switch is in the "alternate" position, alternating operation of Load A and Load B occurs upon the opening of the control switch S1. To terminate alternating operation and cause only the selected load to operate, rotate the switch to position "A" to lock Load A or position "B" to lock Load B. The LEDs indicate the status of the internal relay and which load is selected to operate.

Note: Input voltage must be applied at all times for proper alternation. The use of a solid-state control switch for S1 may not initiate alternation correctly. S1 voltage must be from the same supply as the unit's input voltage (see connection diagrams). Loss of input voltage resets the unit; Load A becomes the lead load for the next operation.

Duplexing (Cross Wired): Duplexing models operate the same as alternating relays and when both the Control (S1) and Lag Load (S2) Switches are closed, Load A and Load B energize simultaneously.

The DPDT 8-pin, cross-wired option, allows extra system load capacity through simultaneous operation of both motors when needed. Relay contacts are not isolated.

Features:

- Provides equal run time for two motors
- Alternating or electrically locked operation
- Low profile selection switch
- 10A output contacts
- LED status indication
- Industry standard base connection

Approvals:   

Auxiliary Products:

- **Hold-down clips (sold in pairs):**
P/N: PSC8 (NDS-8)
P/N: PSC11 (NDS-11)
- **Panel mount kit:** P/N: BZ1
- **11-pin socket:** P/N: NDS-11
- **8-pin socket:** P/N: NDS-8
- **DIN rail:** P/N: C103PM

Available Models:

ARP23S	ARP43S
ARP41	ARP61S
ARP41S	ARP63
ARP42S	ARP63S
ARP43	

If desired part number is not listed, please call us to see if it is technically possible to build.

Order Table:

ARP	X	X	X
	Input	Output Form	Switch Operation
	-2 - 24VAC	-1 - SPDT, 8-pin	-Blank - No Switch
	-4 - 120VAC	-2 - DPDT, 11-pin	-S - Rotary Switch
	-6 - 230VAC	-3 - DPDT, 8-pin cross wired	

Specifications

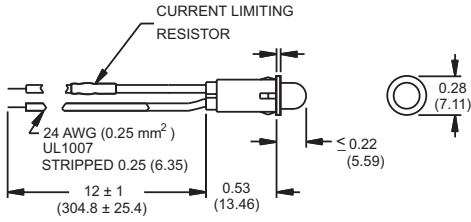
Input	
Voltage	24, 120, or 230VAC
Tolerance	24VAC -15% - 20%
	120 & 230VAC -20% - 10%
AC Line Frequency50/60Hz
Output	
Type	Electromechanical relay
Form	SPDT, DPDT, or cross wired DPDT
Rating	10A resistive @ 120/240VAC & 28 VDC; 1/3 hp @ 120/240VAC
Maximum Voltage	250VAC
Life	Mechanical - 1 x 10 ⁷ ; Electrical - 1 x 10 ⁶

Protection	
Isolation Voltage	≥ 1500V RMS input to output
Mechanical	
Mounting	Plug-in socket
Dimensions3.2 x 2.39 x 1.78 in. (81.3 x 60.7 x 45.2 mm)
Termination	Octal 8-pin or magnal 11-pin
Environmental	
Operating / Storage Temperature	-20° to 60°C / -30° to 85°C
Weight	≅ 5.6 oz (159 g)

NOTE: Unit does not have debounce time delay.

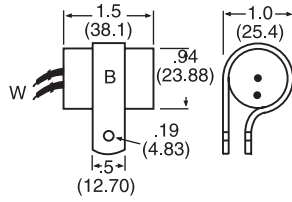
Appendix B - Dimensional Drawings

FIGURE 24



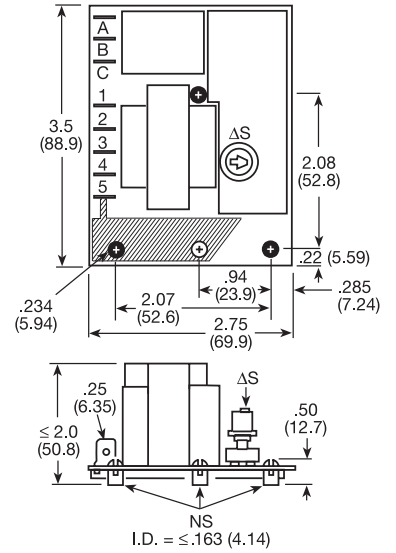
LPM

FIGURE 25



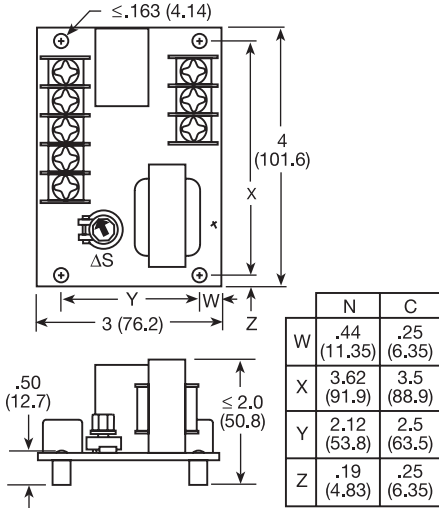
MSM

FIGURE 26



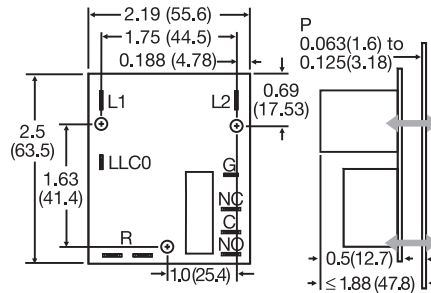
LLC1

FIGURE 27



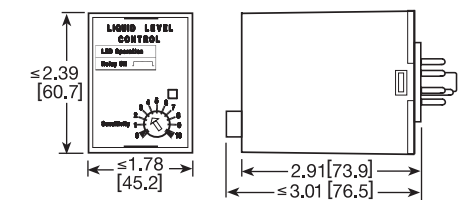
LLC2

FIGURE 28



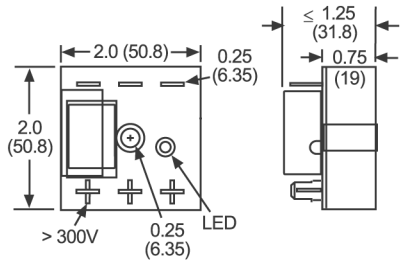
LLC8

FIGURE 29



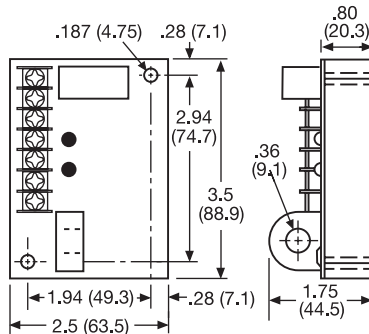
LLC5

FIGURE 30



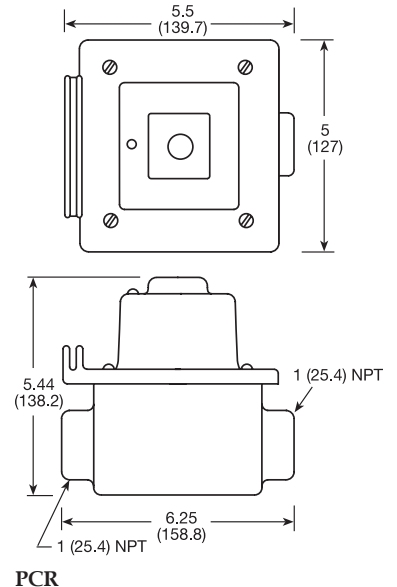
TVM; TVW

FIGURE 32



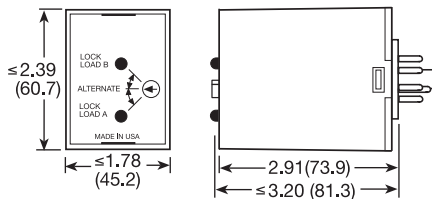
FB; SCR

FIGURE 33



PCR

FIGURE 31

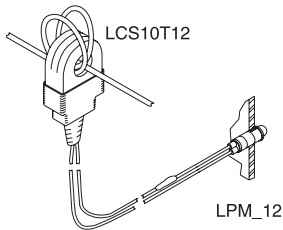


ARP

inches (millimeters)

Appendix C - Connection Diagrams

FIGURE 22 - LCS10T12



Wire Length: 500 ft. (152.4m) max. (Customer Supplied)
CAUTION: The LCS10T12 must be connected to the LPM12 or LPMG12 before current flows to prevent damage or shock hazard. Monitored wires must be properly insulated.

FIGURE 23 - LLC1 Series

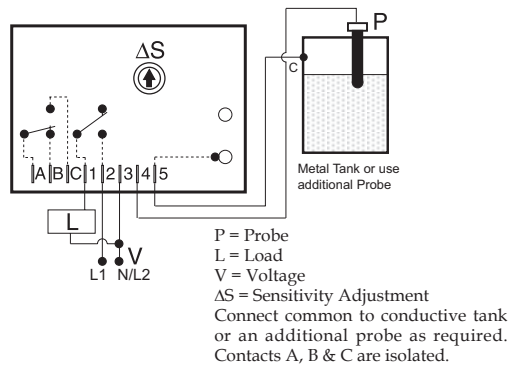


FIGURE 24 - LLC4 Series

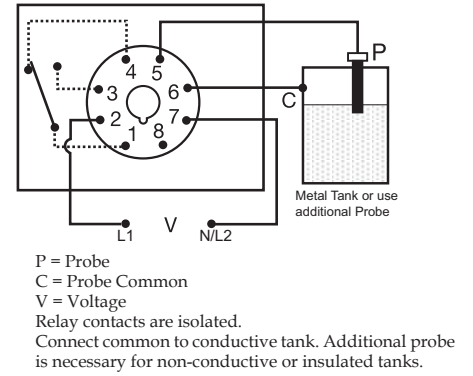
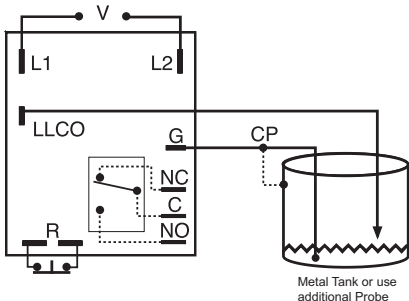


FIGURE 25 - LLC8 Series



V = Voltage
 LLCO = Low Level Probe
 G or CP = Ground or Common (Reference) Probe
 R = Optional NC Reset Switch (not included)
 NO = Normally Open
 NC = Normally Closed
 C = Common or Transfer Contact
 Relay contacts are isolated.
 Connect common to conductive tank. Additional probe is necessary for non-conductive or insulated tanks.

FIGURE 26 - LLC6 Series

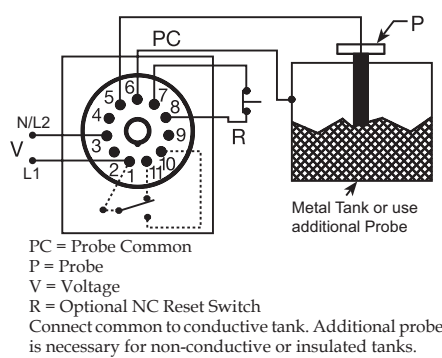
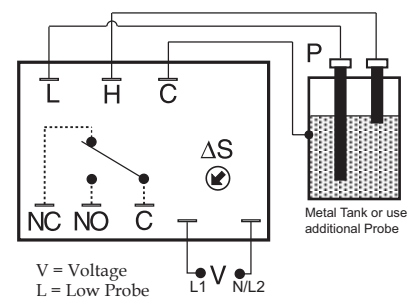
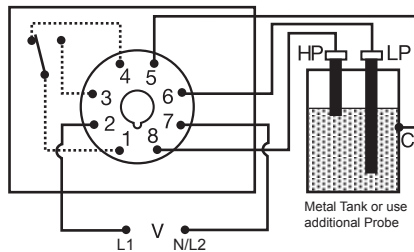


FIGURE 27 - LLC2 Series



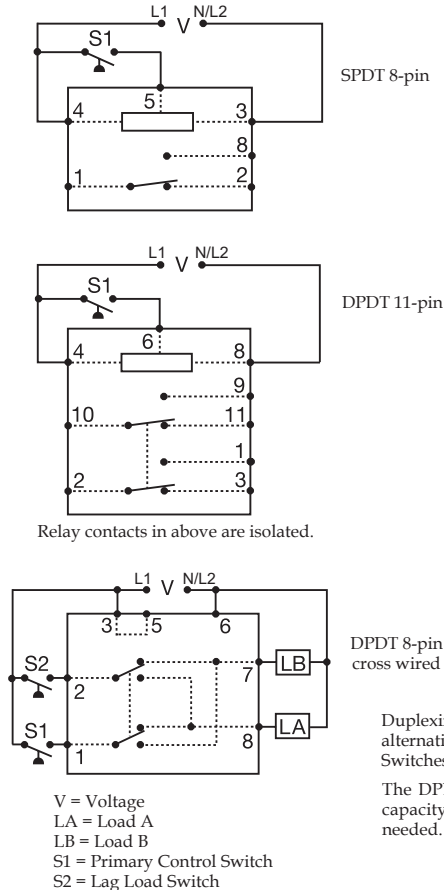
V = Voltage
 L = Low Probe
 H = High Probe
 C = Probe Common
 ΔS = Sensitivity Adjustment
 NC = Normally Closed
 NO = Normally Open
 Connect common to conductive tank.
 Additional probe is necessary for non-conductive or insulated tanks.

FIGURE 28 - LLC5 Series



HP = High Level Probe
 LP = Low Level Probe
 C = Probe Common
 V = Voltage
 Relay contacts are isolated.
 Connect common to conductive tank. Additional probe is necessary for non-conductive or insulated tanks.

FIGURE 29 - ARP Series



Duplexing (Cross Wired): Duplexing models operate the same as alternating relays and when both the Control (S1) and Lag Load (S2) Switches are closed, Load A and Load B energize simultaneously.

The DPDT 8-pin, cross wired option, allows extra system load capacity through simultaneous operation of both motors when needed. Relay contacts are not isolated.