

## DRA Series Contactors

### 3 Phase AC Contactors & AC Motor Reversing Contactors

DRA Series Solid State Contactors offer the advantages of Crydom's proven state-of-the-art solid state AC switching technology in a ready-to-use contactor which requires no additional heat sinking. DRA Series Contactors include a protective Forward/Reverse interlock for motor reversing and are ideal for applications up to 2 Horse Power. For complete specifications, see DRA Series AC 3 Phase Contactors & DRA AC Motor Reversing Contactors datasheets at [www.crydom.com](http://www.crydom.com).

### FEATURES

- 45 mm wide 3 phase & 62 mm wide motor reversing DIN rail mountable versions available
- 480 VAC Operating Voltage
- 5 VDC, 24 VDC, 48 VAC, 120 VAC & 230 VAC Input Control Voltage options available
- Protective Forward/Reverse interlock built-in function for motor reversing
- UL and IEC general use & Motor ratings available
- LED Status indicator for Input Control Voltage

### INSTALLATION INSTRUCTIONS

Please read all installation instructions before using DRA Series 3 Phase / Reversing Contactors.

- Install the contactor on the DIN rail as shown in fig. 1. Vertical mounting operation is recommended.
- Wire the contactor to the input control side following the corresponding wiring diagram (fig. 3 or fig. 4). AWG #24 minimum, AWG #12 maximum (0.2-3.3 mm<sup>2</sup>), choose wire gauge according to load current. Maximum recommended terminal screw torque input 4.3 in-lbs (0.5 Nm).
- Wire the contactor to the AC Line side (L1, L2 & L3) and to the Load side (T1, T2 & T3). AWG #24 minimum, AWG #10 maximum (0.3-5.3 mm<sup>2</sup>), choose wire gauge according to load current. Maximum recommended terminal screw torque output 12 in-lbs (1.37 Nm).
- If multiple units are installed be sure to follow derating curve (fig. 2).

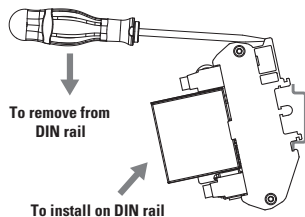
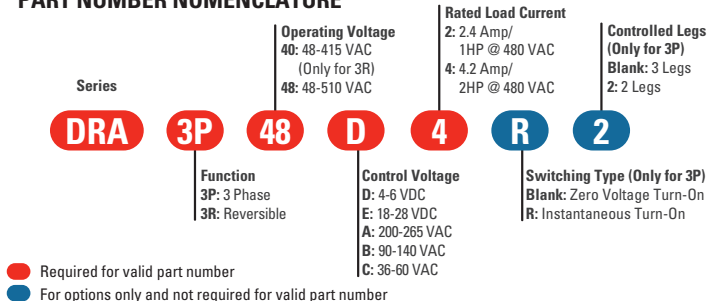


fig. 1 Mounting/Dismounting contactor on DIN rail.

### PART NUMBER NOMENCLATURE



### DERATING CURVE (A,B)

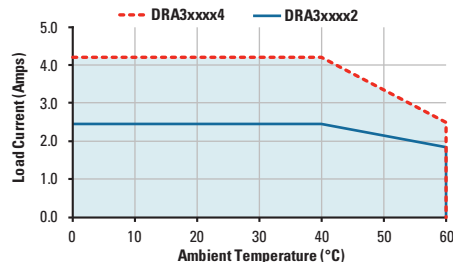


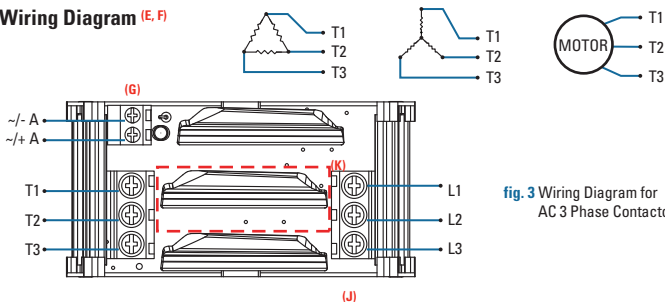
fig. 2 Derating Curve for 3 Phase & Motor Reversing contactor.

Temp.	DRA3Pxxx2	DRA3Pxxx4	DRA3Rxxx2	DRA3Rxxx4
40°C	1 HP (0.75 KW) (C)	2 HP (0.75 KW)	1 HP (0.75 KW)	2 HP (1.5 KW)
60°C	¾ HP (0.55 KW) (D)	1 HP (0.37 KW)	¾ HP (0.55 KW)	1 HP (0.75 KW)

- (A) Unless otherwise noted, all ratings are at 0 mm air gap for adjacent similar parts.
- (B) Resistive Load Current rating for AC Control is 3.4 A @ 0 mm air gap. For maximum ratings use 45 mm air gap.
- (C) AC-53a rating for DRA3Pxxx2 (A, B & C suffix) is 0.55 KW @ 480 VAC.
- (D) AC-53a rating for DRA3Pxxx2 (A, B & C suffix) is 0.37 KW @ 480 VAC.

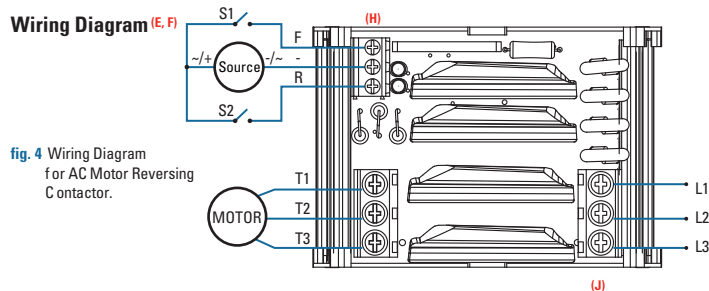
### DRA3P

#### Wiring Diagram (E, F)

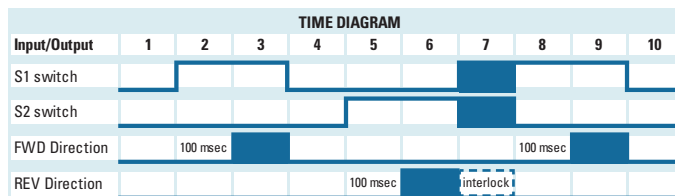


### DRA3R

#### Wiring Diagram (E, F)



S1	S2	Forward	Reverse
Open	Open	Off	Off
Closed	Open	On	Off
Open	Closed	Off	On
Closed	Closed	Off	Off



#### WARNING

##### RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching.
- Follow proper mounting instructions including torque values.
- Do not allow liquids or foreign objects to enter this product.

Failure to follow these instructions can result in serious injury, or equipment damage.

#### DANGER

##### HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Turn off power supply before working on this equipment.

Failure to follow these instructions will result in death or serious injury.