



Definite Purpose (DP) Contactors



INSTALLATION INSTRUCTIONS

APPLICATION

These electromagnetically-operated Definite Purpose Contactors provide switching for starting induction motors. See Table 1 for contact ratings.

Table 1. Contact Ratings.

Model Rating (A)	Line Volts	Motor Load Rating A/Pole		Resistive Load Per Pole	
		AFL	ALF	A	kW
20	240/277	20.0	100	30	7.2/8.3
	480	10.0	50	30	14.4
	600	8.0	32	30	18.0
25	240/277	25.0	125	30	7.2/8.3
	480	10.0	50	30	14.4
	600	8.0	40	30	18.0
30 (1 pole)	240/277	30.0	150	40	9.6/11.1
	480	15.0	75	40	19.2
	600	12.5	50	40	24.0
30 (2 pole)	240/277	30	125	40	9.6/11.1
	480	10	50	40	19.2
	600	8	32	40	24.0
40 (1 pole)	240/277	40.0	180	55	13.2/15.2
40 (2 pole)	240/277	40.0	150	55	13.2/15.2
	600 ^a	40.0	110	55	13.2/15.2

^a Device not tested for ARI-780 Standard at 600V; rating shown is Underwriters Laboratories Inc. (UL) rating.

INSTALLATION

When Installing this Product...

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, check out product operation as provided in these instructions.



CAUTION

Disconnect power supply before beginning installation to prevent electrical shock or equipment damage.

Location

Locate the contactor on a flat, solid surface as close as possible to the equipment being controlled.

Mounting and Wiring

Disconnect power supply before beginning installation to prevent electrical shock or equipment damage. Be sure all wiring complies with local codes and ordinances.

IMPORTANT

Do not exceed the contact and coil ratings when wiring the contactor into the system.

New Installation

1. Mount the contactor in a vertical position for best performance. Horizontally-mounted contactors have a 12 percent lower efficiency.
2. Use two screws to mount the contactor. Select models use a shear formed panel tab to mount the contactor. See Fig. 1.
3. See equipment manufacturer wiring instructions or Fig. 2.
4. Attach the line wires to the contactor using terminal clamp screws.
5. Attach the load wires using No. 10 binding screws.
6. Use pressure lugs for field wiring with wire larger than No. 8.

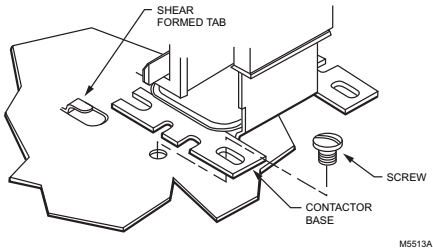
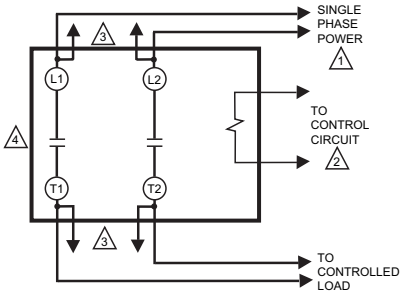


Fig. 1. Typical contactor mounting.





- 1 POWER SUPPLY. PROVIDE OVERLOAD PROTECTION AND DISCONNECT MEANS AS REQUIRED.
- 2 THE CONTROL CIRCUIT INCLUDES LINE VOLTAGE OR LOW VOLTAGE POWER SUPPLY (DEPENDING ON MODEL USED), CONTROLLER AND/OR SAFETY DEVICES.
- 3 QUICK-CONNECT TERMINALS FOR ACCESSORY CONNECTIONS ONLY.
- 4 FOR REPLACEMENT OF SINGLE POLE CONTACTORS WITH TRICKLE HEAT, A SUITABLY SIZED JUMPER WIRE SHOULD BE PLACED BETWEEN L1 AND T1.

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Fig. 2. Typical wiring diagram.

Replacement Installation

1. Remove and identify contact and coil leads to assure correct connection to the new contactor.
2. Remove the mounting screws from the old contactor.

3. Mount the new contactor using the screws provided. Some models include a 138550 Mounting Adapter Plate for use when replacing competitive controls.
4. Reconnect the contact and coil leads to the proper terminals.

CHECKOUT

Always conduct a thorough checkout when installation is complete. Restore power supply and operate the contactor and controlled equipment to assure the contactor pulls in when the coil is energized and the controlled equipment operates as intended.



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