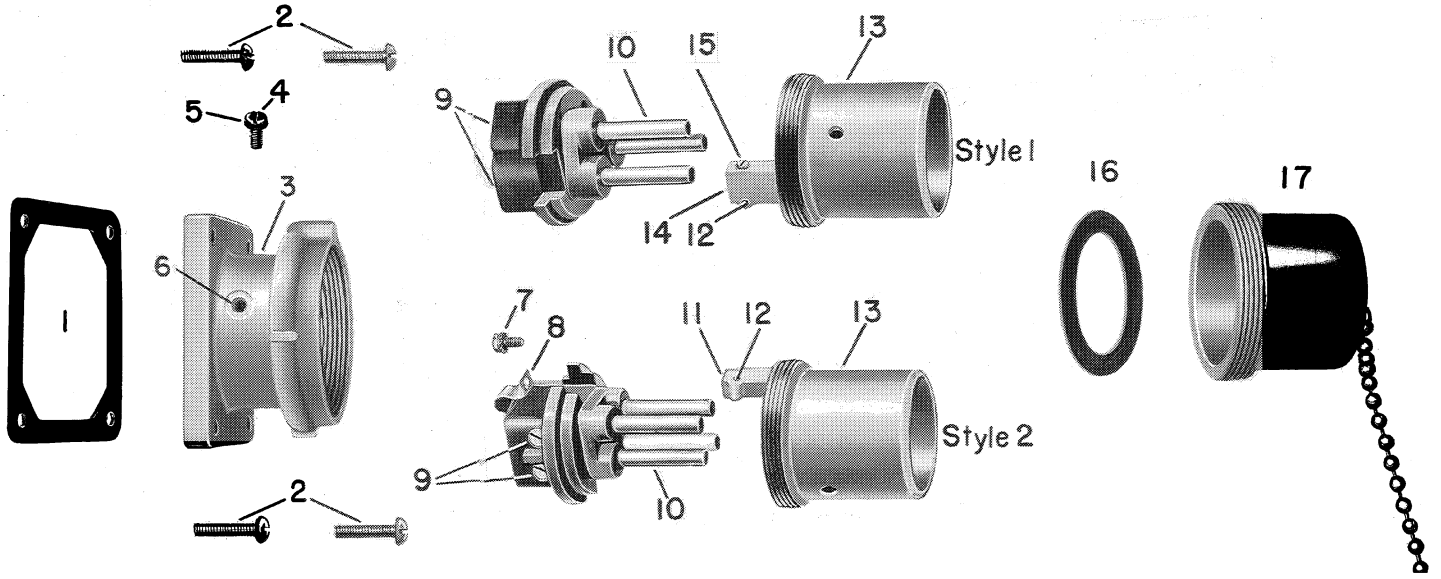
TYPE APQ ARKTITE PLUG WITH RECEPTACLE MOUNTING FLANGE

MODEL M-54
30, 60 & 100 AMPERES
2,3 & 4 POLE, STYLES 1 & 2

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

IF 292

Installation & Maintenance Information



I. To Dis-Assemble Plug

1. Remove cap (17)
2. Remove screw (4) with nylon washer (5) which is inserted through clearance hole (6) into tapped hole (12).
3. Unscrew sleeve (13)

II. To Connect Cable to Plug

1. Bring conductors from junction box through gasket (1) and mounting flange (3).
2. Strip outer cable insulation and ends of individual conductors.
3. Loosen screws (9) and slide prepared ends of conductors into contact recesses, observing proper polarity.
   Note: In Style 1, loosen screw (15) and insert grounding conductor into recess (14). Tighten screws.

III. To Re-Assemble Plug

1. Slide assembled plug interior parts into sleeve (13). If soldering has been done on Style 2, insert screw (7) through grounding strap (8) into hole (11).
2. Thread mounting flange housing (3) onto sleeve (13). Back mounting flange housing (3) off until clearance hole (6) comes into alignment with tapped hole (12).
3. Insert screw (4) with nylon washer (5) through clearance hole (6) into tapped hole (13). Tighten screw firmly.
4. Attach gasket (1) and mounting flange housing (3) to junction box using four round head screws (2).

IV. Polarity and Phase Rotation

Arktite plugs and receptacles are polarized so that the plug will enter receptacle only one way. Each hole for contact is identified by a color dot or number. The color identifications have the same physical locations as the number identifications set forth in the following table:

Unidentified location for grounding

Color Dot	Number
Red	1
White	2
Russet	3

To insure uniformity, follow instructions below:

1. Usually conductors in a portable cable or cord are identified by colors. We assume that these colors agree with those given in Article 210-5 of the National Electrical Code on multi-wire branch circuits; also that there is an additional wire in the cable uninsulated or identified green, to conform to Article 250-42 and 250-45 of the Code. If the conductors are not identified with these colors, these colors may be assumed in making proper connections.

2. Assuming color identification as described above, the grounded white wire of a circuit should always be connected to the contact identified by a white dot or a number 2 in the insulating body adjacent to the pressure connector terminal.

3. The grounding wire, identified green+, should be connected for Style 1 plugs to the pressure connector cast integral with the plug sleeve; for Style 2 plugs and receptacles to the pressure connector in the unidentified (or natural colored) hole of the insulating body.

*Identified (white) wire or terminal must not be used for equipment grounding. See + footnote below.

+ If the portable cord or cable contains an uninsulated wire, or a wire identified green, this is the wire to be used for grounding non-current-carrying metal parts of the portable device. If there is no green or bare wire in the portable cable, some other wire may be selected, and treated as though it

were green. Such wire is to be connected, through the plug and receptacle connections provided for that purpose, to the (grounded) conduit or to some other non-current-carrying conductor that is permanently and effectively grounded in accordance with Article 250 of the National Electrical Code.

V. Horsepower Ratings of Arktite Plugs and Receptacles

Arktite plugs and receptacles are listed by Underwriters' Laboratories, Inc., with ampere and voltage ratings, but not with horsepower ratings for plugs and receptacles above certain sizes, because UL feels that such horsepower ratings might be taken to imply that they are suitable for regular duty in starting and stopping motors.

For this reason, horsepower ratings are not marked on the Arktite nameplates. However, it is sometimes desirable to know the maximum horsepower rating of a motor which can be supplied by a plug and receptacle of given size.

Regular Use. In the schedule below, many of the horsepower ratings given, especially at the lower voltages, are limited by the ampere rating and wire size; not because of possible failure at high ratings. Others, especially at the higher voltages, are maximum size motor that should be used for the following reasons:

Plugs and receptacles should not be used regularly for starting and stopping motors. However, in an emergency, it should obviously be possible to stop the motor by pulling the plug without any danger of arcing over at the receptacle. Such an emergency might occur just as the motor is being started, or when the motor has been stalled by too heavy a load.

Arktite plugs and receptacles have been tested with locked-rotor current; and if the plug is pulled all the way out of the receptacle without abnormal delay, it will safely break the circuit (even if the motor is stalled) for any motor up to and including the size given in that part of the schedule under the heading "For Regular Use".

Disconnecting Use Only. The motor sizes given in the schedule under the heading "For Disconnecting Use Only" are the maximum sizes for which the plugs and receptacles have sufficient current carrying capacity. For larger motors, the plug and receptacle terminals are not large enough to take wires of the required size.

If used for larger motors than the size given under "For Regular Use" (but not larger than given under "For Disconnecting Use Only"), the plug should not be inserted nor withdrawn unless the controller or some switch controlling the circuit is "off". The schedule of approximate full load current for a.c. motors is given below.

Wires, Poles, and Phases	Ampere Rating of Plug and Receptacle	MAXIMUM HORSEPOWER RATING OF MOTOR							
		For Regular Use **				For Disconnecting Use Only ++			
		115 Volts	230 Volts	460 Volts	575 Volts	115 Volts	230 Volts	460 Volts	575 Volts
2W 2P &	30	3	5	10		3	5	10	
2W 3P	60	5	10	15		5	10	25	
Single Phase	100	7 1/2	15	25		7 1/2	15	30	
3W 3P &	30	3	10	20	15	3	10	20	25
3W 4P	60	10	20	30	25	10	20	40	50
Three Phase	100	15	30	40	30	15	30	60	75
3W 3P & 3W 4P	30	3	7 1/2	15	15	3	7 1/2	15	20
Two Phase	60	7 1/2	15	30	25	7 1/2	15	30	40
Three Wire	100	10	25	40	30	10	25	50	60
4W 4P	30	5	10	25	20	5	10	25	30
Two Phase	60	10	25	40	40	10	25	50	60
Four Wire	100	15	30	50	40	15	30	60	75

** For regular use; that is, not for regular starting and stopping duty, but plug may be withdrawn with load on, in an emergency.

++ For disconnecting use only. Plug not to be inserted or withdrawn at any time while the load is on.

NOTE: Some horsepower ratings marked "For Disconnecting Use Only" and "For Regular Use" are the same since they correspond to the maximum current carrying capacity of the plug. No advantage could be taken of the limitation "For Disconnecting Use Only".

COOPER
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