



SERVICE BULLETIN

Title: Temporary Power For Service Tools

Models Affected: Pressurizer 2000, Portable Welders, Etc.

Number: C9202

Date: 4/22/92

Supersedes: None

Date:

Purpose:

This bulletin includes information regarding temporary power supplies and wiring for portable service tools which require higher voltages or amp ratings than usually available near a chiller.

File: Controls–Wiring

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General:

Service tools such as the Pressurizer 2000 and portable welders often require a power supply that isn't readily available at the chiller. It is preferable to have the customer run a power supply to the immediate area but if that isn't possible temporary power wiring that meets safe electrical practices must be provided.

Power Source:

Select a power source as close as possible to where the service tool will be used.

The power supply must be of the proper voltage and amp rating to provide the power requirements of the service tool.

Often a pump starter will be close and large enough to power the tool. If not the compressor starter may be acceptable. Obviously 2300 and 4160 volt starters can not be used.

There must be a circuit breaker or fused disconnect at the power source rated at not greater than 225% of the amp rating of the service tool.

Using a Pump Starter:

!!!!LOCKOUT AND TAG THE POWER SUPPLY TO THE STARTER BEFORE PROCEEDING

If a pump starter is rated within 225% it can serve as the disconnect.

Run the service tool's power cable into the starter panel through a knockout opening, securing it with a two-screw cable clamp and connect the three phases in place of the load wires to the pump.

!!!!CLOSE THE STARTER DOOR

Using the Compressor Starter:

!!!!LOCKOUT AND TAG THE POWER SUPPLY TO THE STARTER BEFORE PROCEEDING

A chiller compressor starter can be used but a properly sized circuit breaker or fused disconnect must be attached to the starter.

Connect the line side of the disconnect to the main starter line side or load side if the starter can be disabled so that the compressor can't start.

Use a two-screw cable clamp to secure the cable between the two panels.

It is preferable to connect to the starter using aux. meter threaded connections rather than loosening the main power lugs.

Run the service tool's power cable into the small disconnect through a knockout opening, securing it with a two-screw cable clamp.

!!!!CLOSE THE STARTER DOOR

Splicing:

!!!!LOCKOUT AND TAG THE POWER SUPPLY BEFORE PROCEEDING

If the power wires on the service tool aren't long enough to reach the starter they can be connected to an extension cable with a wire size rated at least 125% of the amps of the service tool.

The two cables should enter a junction box (a standard 4 x 4 box is acceptable) through knockout openings and be secured with two-screw cable clamps. Splicing and taping the connections without a junction box is not acceptable.

The wires can be joined with wire nuts if the cables aren't too large or a connector block can be fastened into the junction box.

Replace the cover on the junction box.

General Safety Recommendations:

Tape the temporary cable and the service tool's cable to the floor with duct tape.

Use standard lockout/tagout procedures even with temporary disconnects.

Do not run cables through open starter doors.

Circuit breaker and fused disconnect panels are available with a heavy duty receptacle that is mechanically interlocked so that the plug can't be inserted or pulled out with the disconnect energized. A mating plug can be added to the service tool's power cable.

For example, a 60 amp, fusible, NEMA 12 disconnect is available from Cutler-Hammer with an interlocked power plug. See [Page 6](#).

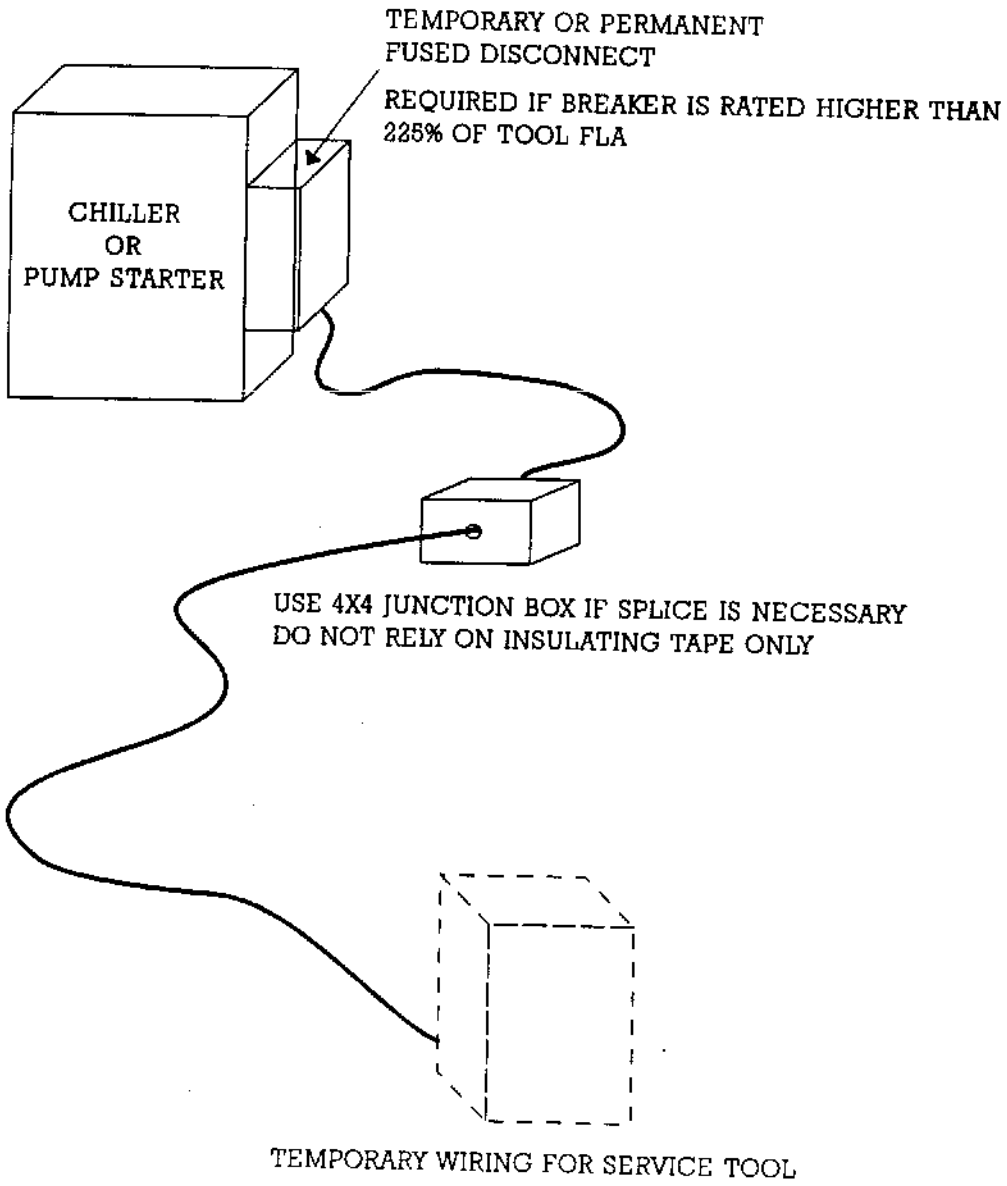
Disconnect	DH362FD4WRK
Power plug	JPD83046

Removing Temporary Wiring:

!!!!LOCKOUT AND TAG THE POWER SUPPLY TO THE STARTER BEFORE PROCEEDING

Disconnect the temporary wiring and plug any holes made in the starter cabinet with UL approved knockout plugs.

Note: The Pressurizer 2000 has a FLA of 37 amps (480v) and comes with No. 6 wire.



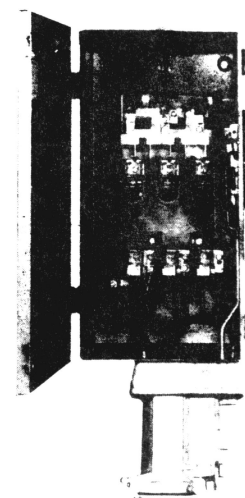
CUTLER-HAMMER SAFETY SWITCHES

Heavy Duty Single Throw with Receptacle

DESCRIPTION

For portable power applications such as welders, infrared ovens, batch feeders, conveyors and truck and marine docks. Cutler-Hammer heavy duty, safety switches are pre-wired and interlocked to polarized receptacles for three-phase, three-wire, grounded type power plugs. Receptacles are interlocked to handle mechanisms so that power plugs may not be inserted or removed when switch is in the ON position except for 30A ARKTITE. Power plugs are not supplied with the receptacles. Switches with receptacles are UL listed under File #E5239. Short-circuit ratings are 200,000 RMS symmetrical amps with class R fusing and 10,000 amps with class H fusing, or non-fused.

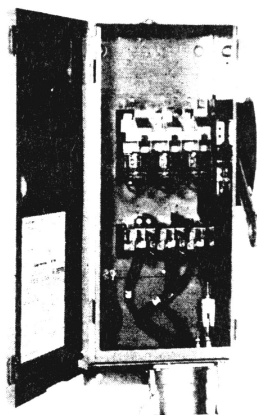
DH362FDK2WR



SAFETY SWITCHES WITH RECEPTACLE

K-Series 3-Pole 600 Volt Fuse Clips

Switch Amps	Description	Catalog Number	Price
30	Crouse-Hinds ARKTITE ① Fusible, NEMA 12 ②	DH361FDK2WR	\$1308
60	Non-fusible, NEMA 12	DH362UDK2WR	1255
60	Fusible, NEMA 12	DH362FDK2WR	1338
30	Pyle-National QUELARC ③ Fusible, NEMA 12	DH361FD4WRK	1386
60	Fusible, NEMA 12	DH362FD4WRK	1338
100	Fusible, NEMA 12	DH363FD4WRK	2008
30	Amerace (Russellstoll) MAX-GARD ④ Fusible, NEMA 12	DH361FD3WRK	1386
60	Fusible, NEMA 12	DH362FD3WRK	1338
100	Fusible, NEMA 12	DH363FD3WRK	2008



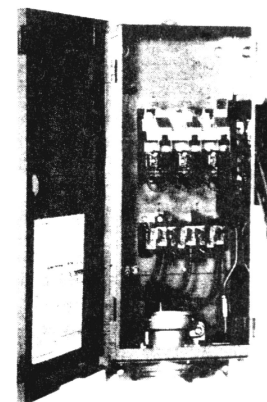
DH362FD4WRK

POWER PLUG INFORMATION

For 3ø, 4 Wire, Grounded Receptacle

Description	Volts Ac	Amperes	Catalog Number
Crouse-Hinds ARKTITE ①	480-600	30 60	APJ3485 APJ6485
Pyle-National QUELARC ③ Refer to factory for correct cord size	480-600	30 60 100	JPD53046 or JPD83046 JPD86046 or JPD116046 JPD1110446 or JPD1410446
Amerace (Russellstoll) MAX-GARD ④	480	30 60 100	DS3404MP DS6404MP DS1404MP

DH362FD3WRK



① Trademarks of Cooper Industries, Inc.

② Receptacle **not** interlocked to handle.

③ Trademarks of Brand-Rex Co.

④ Trademarks of Amerace (Russellstoll).