# Pendant Manual Series 20





# **Conductix Incorporated**

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# 1.0 Features and Specifications

#### NEMA 4X and 12, General Purpose Direction Operation Hoist Pendant Station

#### 1.1 Features

- 1.0.1 Designed for use with single phase motors up to 1HP, 120VAC (2HP, 230VAC).
- 1.0.2 The enclosure is a high-visibility orange color and is constructed of high-impact, high-strength flame retardant plastic, for operator safety.
- 1.0.3 Pendant is ergonomically designed for single hand operation.
- 1.0.4 The unit is dust-tight, drip-tight, and completely insulated to prevent electrical shock.
- 1.0.5 An external strain-relief tie point and an internal cable-clamp are provided for added support.
- 1.0.6 A flexible cable entry bushing provides superior protection against the entry of foreign matter, and is easily selected to fit cable diameter.
- 1.0.7 Various standard pushbutton legends are available for marking each pushbutton.

#### 1.2 Mechanical Specifications

- 1.1.1 RECOMMENDED CABLE: Type SO or equivalent, copper conductors, 75°C, size 10 AWG, 6 conductor maximum.
- 1.1.2 CABLE DIAMETERS FOR BUSHINGS SUPPLIED: Min. 8mm through 14mm Max.
- 1.1.3 **EXTERNAL STRAIN RELIEF:** An external strain-relief tie point on the bushing collar has been supplied for the connection of an external-relief wire attached to the upper junction box of the cable.
- 1.1.4 **INTERNAL STRAIN RELIEF:** An internal strain-relief screw has been supplied for optional use of an internal strain relief wire used in some cables, torque screw 14 in. lbs.

#### 1.1.5 TORQUE VALUES:

Enclosure screws: 15 in.-lbs.
Internal cable-clamp: 10 in.-lbs.
Electrical terminal screws: 10 in.-lbs.
External cable-bushing clamp: 10 in.-lbs.
Switch mounting screws: 20 in.-lbs.
Cable-bushing clamp: 25 in.-lbs.

#### 1.3 Electrical Specifications

- 1.2.1 120VAC, 1HP 230VAC, 2HP
- 1.2.2 120VAC, 25A resistive general purpose (intended for intermittent duty using a 10 AWG conductors that is not in excess of 6 feet).
- 1.2.3 Recommended short circuit protection...25A time delay fuse (for 230VAC/2HP rating) AC3 rating: 250VAC, 16A for 250,000 operations.

Warning! Turn off all power supply sources and lockout while working on pendant.

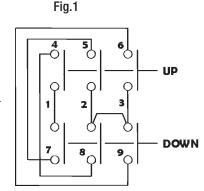
## 2.0 Installation

- 2.0.1 Loosen four (4) rear cover screws and remove back cover from pendant.
- 2.0.2 Remove two (2) screws on top of pendant and remove top bushing collar. Slide the external cable-bushing housing up the cable before putting the cable through the bushing.
- 2.0.3 Slide the bushing over the cable with clamp making sure the bushing top entry fits snugly over the cable. If the bushing is loose, an adequate seal will not be achieved and moisture may leak inside the pendant. Contact Conductix-Wampfler or your dealer should the cable fit too loosely. Trim bushing to correct cable size if required. Use a lubricant if necessary to feed the cable through the bushing.
- 2.0.4 Slide the cable into the top of the pendant and underneath the internal cable-clamp. Slide the bushing collar down the cable and over the bushing, and screw down into place making sure that the bottom of the bushing is seated properly in the top of the pendant. Tighten the internal cable clamp to recommended torque values.
- 2.0.5 Terminate wires to be connected to the unit with UL listing ring terminals. Connect wiring connections to the push-button terminals using the typical wiring schematic in Fig.1. and also using the recommended torque values above. Keep wire lengths as short as possible.
- 2.0.6 Once wires have been terminated inspect for correct visual operation of contacts. Depress each pushbutton and verify that each button returns freely to open position. Also check operation of mechanical interlock. Tighten switch-mounting screws if switch block appears loose. Observe torque values above when installing or replacing any components.
- 2.0.7 Re-install the rear cover observing torque values above.
- 2.0.8 Check operation of pendant before returning to service. Do not use any piece of equipment that demonstrates irregular operation.

#### 2.1 Legend Insert Replacement

- 2.2.1 Remove existing legend insert by using a small screwdriver to pry off the plastic button cover.
- 2.2.2 Place the new insert in the recessed area, and replace the plastic cover by lining up the guide notches and depressing it into place.
- 2.2.3 All Conductix-Wampfler Series 20 pushbutton switches come equipped with an ANSI warning label. Should this label become illegible contact

  ConductixWampfler for a replacement.



Wiring Connections

- 1-3 1 phase power source
- 1-6 Main winding
- 4-5 Start winding

# **Notes**

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