

## Heavy Duty Industrial Substation

(Ex-2) Model 7090

### Features

- Three programmable call buttons for instant contact with any extension number or feature.
- Rugged waterproof, dustproof and shockproof casing of orange polyester with fibre glass reinforcement.
- Designed for Ex-range 2 - German standard.
- Extra large call keys with polyester protection.
- Noise cancelling dynamic microphone with protective flange.
- Large microphone live lamp (red).
- Adjustable speaker volume with potentiometer inside the station.
- Screw terminals for easy connection of installation cables.
- Freely programmable extension number (1-, 2-, 3- or 4-digit number).

### Description

This Industrial Substation is a waterproof model designed for humid, dirty and outdoor conditions. It can operate in an ambient temperature range from -30°C to +70°C (-22°F to +158°F). The station consists of a rugged waterproof and dustproof casing of orange polyester with fibre glass reinforcement. The front panel is hinged to the back casing to allow easy access during installation and service. It is equipped with screw terminals with labels ensuring easy installation. Two glands give waterproof and dustproof connection of installation cable and loudspeaker wires.

The station's noise cancelling microphone provides clear communication and effectively excludes background noise. A separate external loudspeaker (20 Ohm) must be connected and positioned at least one meter away from the station. Both the loudspeaker volume and the microphone sensitivity can be adjusted with potentiometer inside the housing.

The station is designed for use in explosion hazardous areas, Ex-zone 2. It meets the German Standard VDE 0165, Paragraph 6.3.

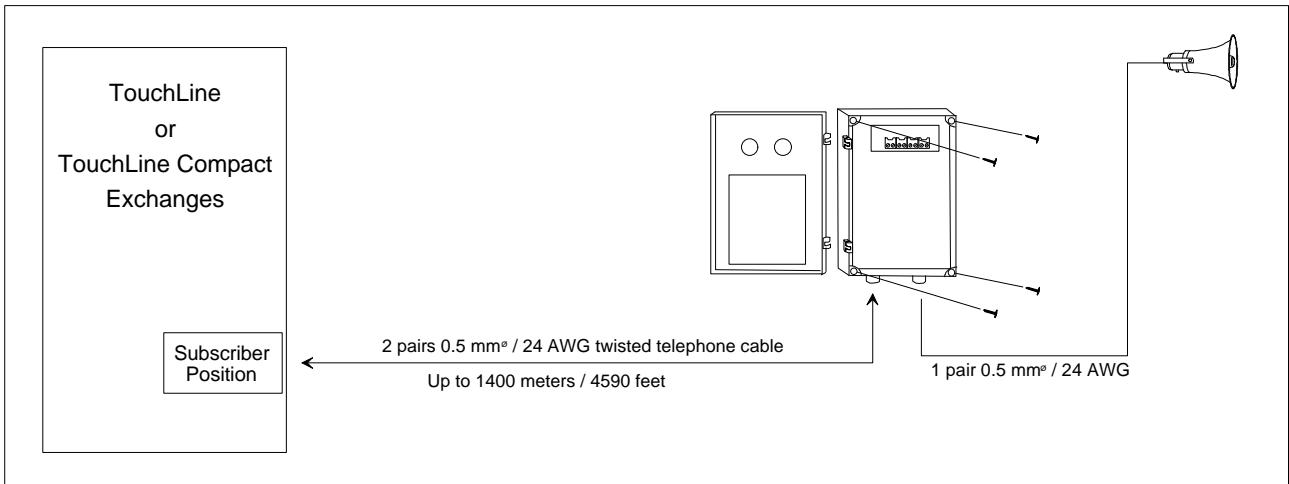


### Specifications

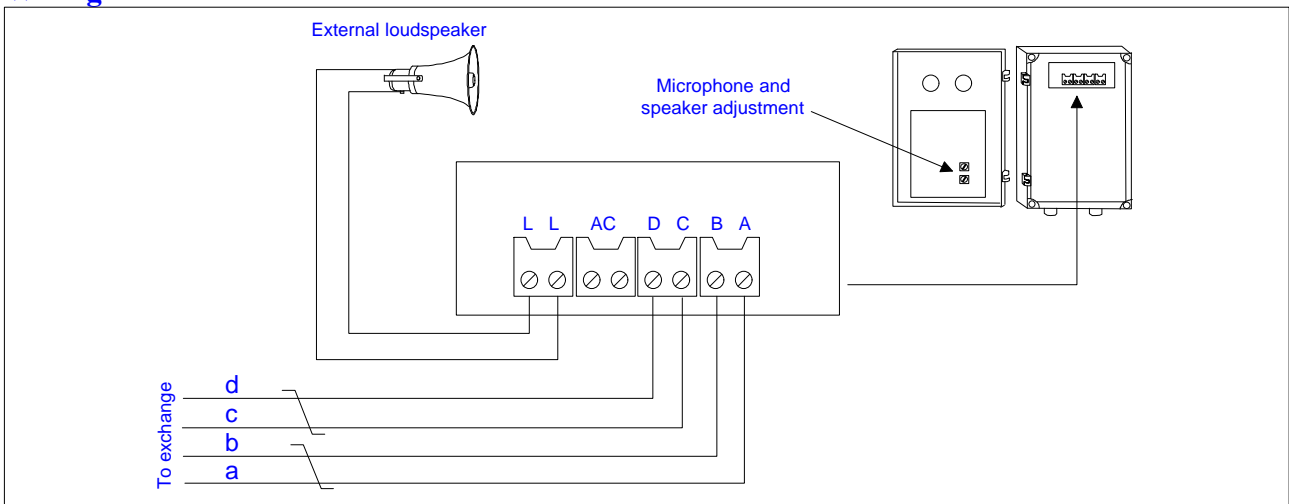
Operating Voltage:	From exchange.
Cable Requirements:	2 pair 0.5 mm <sup>Ø</sup> / 24 AWG twisted telephone cable.
Temperature Range:	-30° C to +70° C -22° F to +158° F
Humidity Range (non-condensing):	10% - 85% RH
Dimensions:	160 mm W x 260 mm H x 137 mm D 6.24" x 10.14" x 5.34"
Classifications:	IP65  Designed according to Ex-range 2, VDE 0165, Paragraph 6.3 (German Standard) and DIN 57165.
Finish:	Polyester with fibre glass reinforcement  Orange RAL 2004 paint
Sound pressure at 1m from external speaker (20 Ohm):	82 dB (0.5 mm cable x 100 m, 8.0V on subscriber board , 1 kHz)
Loudspeaker Impedance:	20 Ohm
Frequency Range:	500-5000 Hz (± 8 dB)
Microphone Impedance:	200 Ohm
Mic. feedback damping:	24 dB
Mic. amplifier impedance:	600 Ohm
Microphone amplifier output voltage:	300 mV
Connector Type:	Screw terminals
Gland Diameter:	2 x PG16
Indicator:	LED (red)

# Heavy Duty Industrial Substation (Ex-2) - Model 7090

## Installation



## Wiring



Order Number	Description	Ship Weight metric/imperial
100 7090 000	Heavy Duty Industrial Substation (Ex-2, IP65, without loudspeaker)	3 kg / 6 lb. 10 oz.
<b>Accessories</b>		
2130 272000	10 W / 20 Ohm Weatherproof Horn Speaker	1.4 kg / 3 lb.
2130 272300	15 W / 20 Ohm Weatherproof Horn Speaker	1.4 kg / 3 lb.