

20 / 32 FKUD .. & 20 / 32 FKVD .. Crane Station with Two Keypads



Features and Functions

- Robust crane station for stationary or mobile use in industrial environments
- 20 or 32 configurable direct call keys
- Configuration of up to 16 channels, 1 channel is preset
- 2 external, freely configurable control inputs
- Available as VHF or UHF version
- 2 configurable control outputs

INDUSTRONIC crane stations ensure flexible wireless communication in industrial environments. They are easy to operate, extremely robust and can be easily integrated into an already existing PMR network. They can also communicate with an INDUSTRONIC communication system.

The dynamic microphone and the premium speaker ensure superior quality of voice transmission and enable clear communication, even at high ambient noise levels.

Design

The crane station of the 20 / 32 FKUD .. or 20 / 32 FKVD .. series consists of a crane operator station with two integrated keypads, a separate speaker and the radio device which is installed in a separate housing (control unit). The crane operator station provides 20 momentary switches or 32 membrane keys and a microphone. The remote speaker is directly connected to the control unit.

Depending on the application, the control unit is either equipped with a radio device for the 70 cm UHF range (DM1400/EU UHF) or the 2 m VHF range (DM1400/EU VHF). This radio device can be used in private PMR networks. Prior to commissioning, a license for the use of frequencies must be acquired from the corresponding national authority.

Two inputs and two outputs as well as one external AF output are pre-wired at external terminals of the control unit. The inputs can be used for potential-free contacts, e.g. for a foot switch. One control output can be used together with an AF output to activate an external amplifier. The second output can be used to activate a flashing beacon, for example.

Call Control and Configuration

Selective calling (5-tone calling) and/or dual-tone multi-frequency (DTMF) can be used for call control. The configuration is performed by INDUSTRONIC using a standard PC and the parameters are permanently stored in the crane station.

Other Features

- Call storage configurable for each control unit
- Transmitting power of up to 25 W
- Interface to INDUSTRONIC systems
- One audible signal generator and two audible signal analyzers can be configured for each key
- Key or control input can be configured with the function "repeat call/ talk back"
- 1 separate AF output

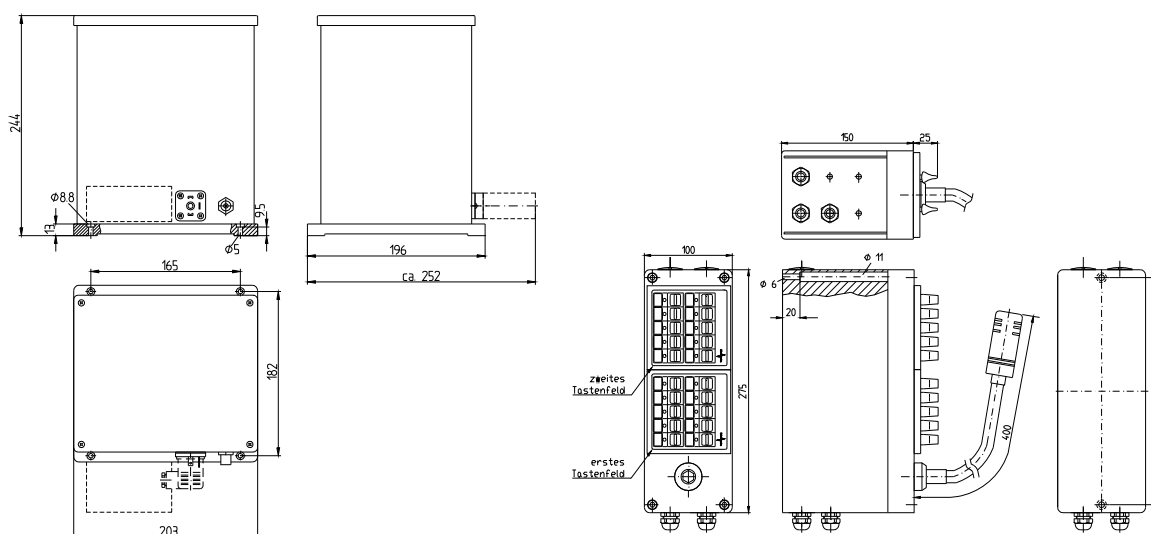


Figure: Dimensional drawing 20 / 32 FKUD .. or 20 / 32 FKVD ..

Mechanical Data Crane Operator Station

- Height x width x depth: 100 mm x 275 mm x 150 mm (3.9" x 10.8" x 5.9")
- Housing material: Glass-fiber reinforced polyester
- Weight: Approx. 3.6 kg (approx. 7.9 lbs)
- Cable length: 8 m

Mechanical Data Housing of Control Unit

- Height x width x depth: 244 mm x 203 mm x 196 mm (9.6" x 8" x 7.7")
- Housing material: Aluminum
- Weight: Approx. 5 kg (approx. 11 lbs)

Mechanical Data Speaker

- Diameter x depth: Ø 133 mm x 133 mm (5.2" x 5.2")
- Housing material: Aluminum
- Weight: Approx. 1 kg (approx. 2.2 lbs)
- Cable length: 8 m

Electrical Data

• Operating voltage	110 VAC / 230 VAC 24 VDC
• Microphone	Noise-canceling with dynamic compression
• Microphone amplifier	Amplifier with compressor
• Loudspeaker	Max. 6 W / 8 Ohms
• 5-tone selective calling	ZVEI 1
• Dual-tone multi-frequency	DTMF

Electrical Data Radio Device in Control Unit (DM1400 UHF / DM1400 VHF)

• Transmitting power	Adjustable 1 W to 25 W
• Frequency range	VHF: 146 MHz to 174 MHz UHF: 403 MHz to 470 MHz
• Channel spacing	12.5 kHz / 20 kHz / 25 kHz
• Modulation limiting	+/- 2.5 kHz at 12.5 kHz +/- 4 kHz at 20 kHz +/- 5 kHz at 25 kHz
• Receiver sensitivity	<0.3 μ V (12 dB SINAD)
• Intermodulation (ETS)	>65 dB
• Frequency stability	+/- 2.5 PPM
• Antenna impedance	50 Ohms
• EC directive	1999/5/EC
• Standards	EN 300086 EN 301489 01/05 EN 60950 EN 300113

Environmental Requirements and Standards

• Degree of protection	Crane operator station: IP40 Control unit: IP65
• Temperature range	-20 °C to +70 °C (IEC 68-2-1/2) (-4 °F to +158 °F)
• Relative humidity	93 % (IEC 68-2-3)

Series Overview Chart	Keys	Operating Voltage	Frequency Range	Type	Type Number
	20	110/230 VDC	403 – 470 MHz	20 FKUD 01	380-799-188
	20		136 – 174 MHz	20 FKVD 01	380-799-189
	20		-	20 FKxD 01	380-799-190
	20	22 – 32 VDC	403 – 470 MHz	20 FKUD 02	380-799-191
	20		136 – 174 MHz	20 FKVD 02	380-799-192
	20		-	20 FKxD 02	380-799-193
	32	110/230 VDC	403 – 470 MHz	32 FKUD 01	380-799-194
	32		136 – 174 MHz	32 FKVD 01	380-799-195
	32		-	32 FKxD 01	380-799-196
	32	22 – 32 VDC	403 – 470 MHz	32 FKUD 02	380-799-197
	32		136 – 174 MHz	32 FKVD 02	380-799-198
	32		-	32 FKxD 02	380-799-199

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