



**131F0878**

**FC-202P22KT4E55H3XGXXXXXXXAXBXXXXX**

This product is not available in this store. Please contact your local [Customer Service Center](#).

[Customer Service Center](#)

- Frequency converter
- FC-202P22KT4E55H3XGXXXXXXXAXBXXXXX
- VLT® AQUA Drive FC-202
- (P22K) 22 KW / 30 HP,
- Three phase, 380 - 480 VAC, IP55 / Type 12
- (H3) RFI Class A1/B (C1)
- No brake chopper
- Graphical Loc. Cont. Panel
- Not coated PCB, No Mains Option
- Latest release std. SW.
- Frame: B2
- No A Option, No B Option
- No C1 option, No D option

Other options according to Model code

**Model code:** FC-202P22KT4E55H3XGXXXXXXXAXBXXXXX

Danfoss VLT® AQUA Drive is dedicated to water and wastewater applications. With a wide range of powerful standard and optional features, the VLT® AQUA Drive provides the lowest overall cost of ownership for water and wastewater applications.

[View Efficiency Data](#)

**PRODUCT DETAILS**

<b>Gross weight</b>	32.05 Kilogram		
<b>Net weight</b>	28.49 Kilogram		
<b>Volume</b>	105.71 Liter		
<b>EAN</b>	5702427402409		
<b>Product View (Switch)</b>	GLBL	Global (Standard)	
<b>Product Group</b>	FC-	VLT® AQUA Drive FC-	
<b>Series</b>	202	202	Advanced version
<b>Power Rating</b>	P22K	(P22K) 22 KW / 30 HP	HP not Valid if T7 drive, HP usually one size down
<b>Phase</b>	T	Three phase	
<b>Mains Voltage</b>	4	380 - 480 VAC	
<b>Enclosure</b>	E55	IP55 / Type 12	IP55 / Type 12 protected against dust and splash water
<b>RFI Filter</b>	H3	(H3) RFI Class A1/B (C1)	RFI Class A1/B (reduced cable length)
<b>Brake - Safe Stop</b>	X	No brake chopper	
<b>LCP</b>	G	Graphical Loc. Cont. Panel	Graphical Local Control Panel (LCP-102)
<b>Coating PCB</b>	X	Not coated PCB	
<b>Mains Option</b>	X	No Mains Option	
<b>Adaptation A</b>	X	Standard Cable Entries	

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## Product Detail | FC-202P22KT4E55H3XGXXXXXXXAXBXXXXX

## PRODUCT DETAILS

<b>Adaptation B</b>	X	No adaptation	
<b>Software Release</b>	SXXX	Latest release std. SW.	
<b>Software Language Pack</b>	X	Standard Language Pack	Software
<b>A Option</b>	AX	No A Option	
<b>B Option</b>	BX	No B Option	
<b>C0 Option MCO</b>	CX	No C0 option	
<b>C1 Option</b>	X	No C1 option	
<b>C Option Software</b>	XX	No software option	Configuration software for speed synchronisation between drives
<b>D Option</b>	DX	No D option	
<b>Frame Size</b>	B2	B2	
<b>Typecode Part 1</b>		FC-202P22KT4E55H3XGX	
<b>Typecode Part 2</b>		XXXXXXXXAXBXXXXX	
<b>Product Catalog</b>	NO_VIEW	NO VIEW	
<b>Power 160% (HO) [KW]</b>	18.5	18.5	
<b>Power 110% (NO) [KW]</b>	22	22	
<b>Height [mm]</b>	664,0	664,0	
<b>Width w/ no C options [mm]</b>	243,0	243,0	
<b>Depth [mm]</b>	261,0	261,0	
<b>Depth with Option A/B [mm]</b>	261,0	261,0	
<b>kVA</b>	30.5	30.5	
<b>Power Loss NO [W]</b>	525	525	
<b>Power Loss NO [W]</b>	525	525	
<b>Power Loss HO [W]</b>	444	444	
<b>Power Loss HO [W]</b>	444	444	
<b>Continuous Current (NO) [A]</b>	44	44	
<b>Intermittent Current (NO) [A]</b>	48.4	48.4	
<b>Continuous Current (NO) [A]</b>	40	40	
<b>Intermittent Current (NO) [A]</b>	44	44	
<b>Continuous Current (HO) [A]</b>	37.5	37.5	
<b>Intermittent Current (HO) [A]</b>	60	60	
<b>Continuous Current (HO) [A]</b>	34	34	
<b>Intermittent Current (HO) [A]</b>	54.4	54.4	
<b>Calculated Gross Weight [kg]</b>		32.05	
<b>Calculated Net Weight [kg]</b>		28.49	
<b>ECCN EU</b>	Y901	Y901	
<b>ECCN US</b>	3A999.a	3A999.a	
<b>Vendor</b>	ERR01	Cannot Determine Vendor	
<b>Recommended Factory</b>	ERR01	Cannot Determine Vendor	
<b>Modelcode01</b>		FC-202P22KT4E55H3XGX	
<b>Modelcode02</b>		XXXXXXXXAXBXXXXX	
<b>Recommended Plant</b>	ERR01	ERR01	

For Documents, Software, Visuals and more information, please use this link to visit the product page on Danfoss Product Store [🔗](#)

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**Accessories**

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**130B3397** [🔗](#)**Back plate IP21/Type 1, IP55/Type 12, B2**

FC 300 back cover for the devices in IP21 / 55 Housing size B2

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**130B4598** [🔗](#)**Weather shield f. outdoor instl A4 to B2**

Weather shield for enclosure sizes A4, A5, B1, B2

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**130B7533** [🔗](#)**Mounting Kit C Option, B/C/D/E/F(not B3)**

MCF105 C Option, Mounting Kit A2 and A3

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**130B5436** [🔗](#)**Side Fixture Mounting Kit**

Side Fixture Mounting Kit for enclosure size A5 / B1 / B2 / C1 / C2

To be used when retrofitting the following MCA options:

MCA 120 Profinet

MCA 121 EtherNet

MCA 122 Modbus TCP

MCA 123 POWERLINK

MCA 124 EtherCAT

Product group: R1

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**130B5435** [🔗](#)**DIN Rail Mounting Kit****130B1243** [🔗](#)**VLT® Analog I/O Option MCB 109, coated**

I / O extension for FC 100, easy to retrofit thanks to modular technology.

Analog inputs / outputs galvanically isolated.

Expands the analog inputs / outputs by:

3 analog inputs: 0 ... 10V / Pt1000 / Ni1000

3 analog outputs: 0 ... 10V

Time switch (RTC backup): lithium cell for 10 years

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Accessories



**130B1218** [🔗](#)

**VLT® Ext. Cascade Contr. MCO 101, ctd**

Upgrades the built-in cascade controller to control multiple pumps

- easy to mount via plug 'n' play
- More advanced pump control in master / follower mode
- Up to 6 pumps in standard cascade control
- Up to 5 pumps in master / follower setup

This MCO option, sits in a B option space.

Danfoss can offer help with programming / setting up MCO options.

Contact Danfoss for advice and prices.

Product group: R



**130B1254** [🔗](#)

**VLT® Adv. Cascade Contr. MCO 102, ctd**

Upgrades the built-in cascade controller to control up to 8 pumps

- More advanced pump control in master / follower mode
- The same cascade management hardware applies to the entire power range up to 1.2 MW
- Up to 8 pumps in standard cascade control
- Up to 8 pumps in master / follower setup

Remember to order the Mounting kit if the above MCO option is required retrofitted.

130B7530 - Mounting kit for enclosures A2 and A3

130B1413 - Mounting kit for enclosure B3

130B7532 - Mounting kit for enclosure A5

130B7533 - Mounting kit for all enclosures B, C, D, E and F (B3excepted)

Danfoss MCO options are not sold without prior advice.

Danfoss can offer help with programming / setting up MCO options.

Contact Danfoss for advice and prices.

Product group: R



**130B1172** [🔗](#)

**VLT® Sensor Input Card MCB 114, unctd**

Protects the motor from being overheated by monitoring the temperature of bearings and windings in the motor. Three self-detecting sensor inputs for 2 or 3 wire PT100/PT1000 sensors. One additional analog input 4–20 mA.



**130B1170** [🔗](#)

**LCP Panel Mounting Kit**

The kit includes fasteners and gasket. No LCP and no cable included.

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**Accessories**


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**130B1212** [🔗](#)**VLT® General Purpose I/O MCB 101, ctd**

MCB 101 - Advanced I / O option

Expands the number of freely programmable

Control inputs and outputs around the following I / Os:

- 3 digital inputs opto-decoupled 0 - 24 V.
- 2 analog inputs 0 - 10 V.
- 2 digital outputs NPN / PNP switchable 24 V
- 1 analog output 0/4 - 20 mA

with reinforced coating

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**130B1210** [🔗](#)**VLT® Relay Option MCB 105, coated**

Relay extension for FC 100 and FC 300.

Extension with 3 additional load relays (changeover contacts),  
easy to retrofit thanks to modular technology.

Painted version for harsh environments,

easy to retrofit thanks to modular technology.

Max. Load 240V AC (resistive): 2 A

Max. Load 240V AC (Cos Phi 0.4): 0.2 A

Max. Load 24V DC (ohmic): 1 A

Max. Load 24V DC (inductive): 0.1 A

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**130B1208** [🔗](#)**1xMCB 107 24V DC coat w. mount. brackets**

Connect an external DC supply to keep the control section and any  
installed option alive during power failure. Enables full operation of  
the LCP (including the parameter setting) and all installed options  
without connection to mains.

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**130B1202** [🔗](#)**VLT® DeviceNet MCA 104, coated**

MCA 104 - DeviceNet interface Option for FC300 and FC100  
for mounting on the control card. Painted version

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**130B1387** [🔗](#)**5xMCB107 24VDC no coat w.out mount brack****130B1386** [🔗](#)**VLT® Profibus DP V1 MCA 101, ctd, 5pcs****130B1385** [🔗](#)**VLT® Profibus DP V1 MCA101, unctd 5pcs**

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**Accessories**


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**130B1272** [🔗](#)**VLT® Sensor Input Card MCB 114, coated**

MCB 114 - PT100 / PT1000 option

For FC100-FC200 and FC302 (painted version)

Enables the evaluation of up to 3 PT 100 or 3 PT 1000 sensors

- Connection of 2 and 3 wire sensors
- Automatic detection of the sensor type
- Additional 4-20mA input

**130B1164** [🔗](#)**VLT® Extended Relay Card MCB 113**

Adds 7 digital inputs and 2 analog outputs for increased flexibility. 4

SPDT relays. Meets NAMUR recommendations. Galvanic isolation capability.

**130B1047** [🔗](#)**Panel Through Mounting Kit, B2**

Push-through frame kit for FC size B2 Contains mounting frame, seal, fastening material and assembly instructions.

**130B1135** [🔗](#)**VLT® PROFINET MCA 120, uncoated**

MCA 120 PROFINET interface

- Supports operation on PROFINET network with extensive properties
- DCP support for easy setting u. Communication parameters via the PLC
- On Board web-Page with Drive Status
- Parameterization with the MCT10 software
- 2 port version, reduced external hardware

**130B1129** [🔗](#)**LCP Mounting Kit FC IP55/66, 8m**

The kit includes fasteners, 8m cable, gasket and a blind cover to ensure IP55/ 66 after the LCP has been mounted elsewhere. The 8m cable is open in one end and the connector block is included in the package. No LCP included.

**130B1125** [🔗](#)**VLT® General Purpose I/O MCB 101, unctd**

MCB 101 - Advanced I / O option

Expands the number of freely programmable Control inputs and outputs around the following I / Os:

- 3 digital inputs opto-decoupled 0 - 24 V.
- 2 analog inputs 0 - 10 V.
- 2 digital outputs NPN / PNP switchable 24 V
- 1 analog output 0/4 - 20 mA

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**Accessories**


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**130B1124** [🔗](#)**VLT® Control Panel LCP 101, numeric**

Numerical control unit for FC 100 and FC 300. Allows access to all device parameters. Quick menu for brief commissioning. Manual / auto switchover and alarm acknowledgment.

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**130B1119** [🔗](#)**VLT® EtherNet/IP MCA 121, uncoated**

MCA 121 EtherNet / IP interface

- Allows connection to EtherNet / IP based Automation systems via CIP (CommonInterface Protocol)
  - 2 port design reduces external components
  - HTTP for diagnosis via built-in web server
  - SMTP, DHCP and FTP protocols
  - Prepared for parameterization with the MCT 10 software via TCP / IP
  - Certified according to ODVA
- 

**130B1118** [🔗](#)**VLT® Ext. Cascade Contr. MCO 101, unctd**

CIRCUITOS MODULARES PARA CONTROLADORES DE VELOCIDAD DE MOTORES ELECTRICOS

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**130B1117** [🔗](#)**LCP Mounting Kit, w/ no LCP**

The kit includes fasteners, 3m cable and gasket - There is no LCP included.

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**130B1114** [🔗](#)**LCP Mounting Kit w/ numerical LCP101, 3m**

The kit includes numerical LCP, fasteners, 3m cable and gasket.

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**130B1113** [🔗](#)**lcp panel kit/fc300 fg-lcp panel kit**

The kit includes graphical LCP, fasteners, 3m cable and gasket.

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**130B1110** [🔗](#)**VLT® Relay Option MCB 105, uncoated**

Relay extension for FC 100 and FC 300. Extension with 3 additional load relays (changeover contacts), easy to retrofit thanks to modular technology.

Max. Load 240V AC (resistive): 2 A

Max. Load 240V AC (Cos Phi 0.4): 0.2 A

Max. Load 24V DC (ohmic): 1 A

Max. Load 24V DC (inductive): 0.1 A

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**Accessories**


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**130B1156** [🔗](#)**USB extension Cable, 650mm**

USB extension kit for FC 300 cable length: 650mm for the housing size: B2, C1 and C2 screw connection M 25

**130B1154** [🔗](#)**VLT® Adv. Cascade Contr. MCO 102, ctd**

Easy to fit. Upgrades built-in cascade controller to operate up to 8 pumps and provide more advanced pump control in master/follower mode. Supports combination of multiple variable speed and fixed speed pumps, as well as configurations with pumps of differing capacity (mixed pump control). The additional 7 digital inputs and the 24-V DC connection to the drive enable flexible adaptation to the application. The same cascade controller hardware is compatible with the entire power range up to 2 MW.

**130B1143** [🔗](#)**VLT® Analog I/O Option MCB 109, unctd**

I / O expansion for FC 100, through modular technology easy to retrofit. Analog inputs/outputs galvanically isolated.

Expands the analog inputs / outputs by:

3 analog inputs: 0 ... 10V / Pt1000 / Ni1000

3 analog outputs: 0 ... 10V

Time switch (RTC backup): lithium cell for 10 years

**130B1137** [🔗](#)**VLT® PTC Thermistor Card MCB 112, ctd**

MCB 112 PTC - thermistor relay MS220DA In connection with ATEX certified explosion-proof motors for full motor protection. Certified PTC sensors are the sole protection required.

Integrable module with ATEX-compliant full thermal motor protection

1 PTB-certified PTC thermistor input

1 switch-off signal for using the Safe Stop function

1 logic output for error identification

**130B1082** [🔗](#)**Mounting Brackets, B2**

Mounting brackets for enclosure size B2

**130B1078** [🔗](#)**VLT® Control Panel LCP 102, graphical**

LCP 102 - graphic control unit for FC100 / 200/300, degree of protection IP66

**130B1077** [🔗](#)**Blindcover, w/ Danfoss logo, IP55/66**

LCP Blindcover IP66

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Accessories



**130B1071** [🔗](#)  
**6 Pole Connector, FC series, 10 pcs**  
 6-pole spring cage connectors 10 pcs



**130B1070** [🔗](#)  
**RS485 plug, FC series, 10 pcs**  
 10pcs RS485 connectors for FC-series.  
 Product group: R



**130B1108** [🔗](#)  
**VLT® 24V DC Supply MCB 107, uncoated**  
 Connect an external DC supply to keep the control section and any installed option alive during power failure. Enables full operation of the LCP (including the parameter setting) and all installed options without connection to mains.



**130B1107** [🔗](#)  
**VLT® Control Panel LCP 102**  
 Graphic operating unit LCP102 Illuminated graphic display with plain text. Supports all languages and characters. Quick menu for brief commissioning. Saving and copying parameter sets. Online help for each function



**130B1102** [🔗](#)  
**VLT® DeviceNet MCA 104, uncoated**  
 Robust, efficient data handling thanks to advanced Producer/Consumer technology. ODVA's strong conformance testing policies ensure products are interoperable, and the AC-drive profile, supported using I/O instance 20/70.21/71, secures compatibility to existing systems.



**130B1088** [🔗](#)  
**LCP Blindcover, w/ Danfoss logo, IP20/21**



**175Z0929** [🔗](#)  
**LCP Cable, 3m**  
 Cable for control panel (LCP), 3 meters  
 Works with the following LCP:  
 Alphanumeric control panel LCP3 - 175N0131  
 VLT® LCP 102 Graphic Display - 130B1107  
 VLT® LCP 101 Numeric Display - 130B1124  
 VLT® LCP 102 Graphic display IP66 - 130B1078  
 Product group: F1

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Accessories

Image  
coming  
soon

**175U0009** [🔗](#)

**Mounting bracket Kit, 216 x 30 x 18mm**  
Mounting angle for flatpack resistor 200W



**175N2584** [🔗](#)

**VLT® EtherNet/IP Modbus TCP gateway**



**134B6488** [🔗](#)

**Panel Through Mounting kit w/o Panel, B2**

Image  
coming  
soon

**134B5225** [🔗](#)

**Remote LCP unit, 10m**  
Remote mounting kit for LCP with cover for outdoor mounting with 10 m  
(33 ft) cable

Image  
coming  
soon

**134B5224** [🔗](#)

**Remote LCP unit, 5m**  
Remote mounting kit for LCP with cover for outdoor mounting with 5 m (16  
ft) cable



**134B5223** [🔗](#)

**Remote LCP unit, 3m**  
Remote mounting kit for LCP with cover for outdoor mounting with 3 m (10  
ft) cable

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## Accessories



### 134B0460 [🔗](#)

#### LCP 103 Wireless Communication Panel

With VLT® Wireless Communication Panel LCP 103 you can communicate with MyDrive® Connect - an app that can be downloaded for iOS and Android based smartphones. MyDrive® Connect makes commissioning easy, monitor and maintain tasks on your frequency converter. VLT® Wireless Communication Panel LCP 103 shows the current status of the drive (On, Warning, Alarm, Wifi connection) via built-in LED. Detailed information is also available using MyDrive® Connect. Here do you have access to i.a. status, menu and alerts. You can also see graphs over the latest available data.

The new VLT® Wireless Communication Panel LCP 103 allows you to wireless communication to the following drives:

- VLT® HVAC Drive FC 102
- VLT® Refrigeration Drive FC 103
- VLT® AQUA Drive FC 202
- VLT® AutomationDrive FC 302

[!] Note!

LCP 103 only works on frequency converters produced in 2018 (White USB stik).

Product group: R1

Image  
coming  
soon

### 134B1992 [🔗](#)

#### Control Terminals w/ screw connections



### 134B7093 [🔗](#)

#### VLT C-option Adapter MCF 107



### 130B0295 [🔗](#)

#### sparepart/terminals accessory bag

Image  
coming  
soon

### 134B1986 [🔗](#)

#### Accessory bag for smooth cable entry B2

Accessory bag for smooth cable entry B2

Image  
coming  
soon

### 130B4847 [🔗](#)

#### extension cable for lcp+communication



### 134B8814 [🔗](#)

#### VLT® PROFINET MCA120 coated 5pcs

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Accessories



**134B8492** [🔗](#)  
Transducer 0-10g, 4-20mA; HS-22B50



**134B8493** [🔗](#)  
Transducer 0-25mm/s RMS 4-20mA  
CBM Transducer 0-25mm/s RMS 4-20mA



**134B8494** [🔗](#)  
Transducer w, temp 0-25mm/s RMS 4-20mA



**134B8496** [🔗](#)  
CABLE ASSY 10M, STRAIGHT SOCKET CONNETC.

Image  
coming  
soon

**134B8497** [🔗](#)  
Cable assy, M12 female connec.10m screen

Image  
coming  
soon

**134B6883** [🔗](#)  
VLT Progr. Contr. MCB 301, coated



**134B7466** [🔗](#)  
Option A Ethernet Package

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**Accessories**

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**134B9414** **Antifreeze Thermostat FS20, 0/+15C**

TWO-PHASE FROST PROTECTION THERMOSTATS FS-20-UW

Electronic frost protection thermostat or frost monitor with switching relay output, continuous temperature and valve output (summation output 0–10 V) and control and cascading output (0–10 V), optionally with connection for a heating element. A IP65 resistant plastic housing with display with the actual temperature, measuring range, overrange/underrange of the set switch point (frost protection temperature) and alarm indicator for "frost" or "error" (capillary breakage, overvoltage/undervoltage), quick-locking screws and a fully active sensor rod made of copper. The delivery scope includes a set of MK-05-K mounting clamps for expert attachment of the sensor rod.

Measuring range: 0...+15 °C / 32...+59 °F

Accuracy: typical ± 1 K (at +10 °C)

Sensor type: 3m Copper rod active along the entire sensor length, min. response length of 25 cm

Input: 1 x 0 -10 V control input DDC

1 x 0 -10 V output valve (frost signal with control voltage and cascading)

1 x potential-free changeover contact (24 V), range of adjustment 0...+15 °C

Current consumption: max. 100 mA at 24 V DC

Load resistance: RL &gt; 50 kOhm

Ambient temperature: -15...+50 °C / 5...+122 °F (Housing) -20...+60 °C / -4...+140 °F Sensor and capillary tube &gt; 20 cm from the housing.

Power: 24VAC/DC (± 10%) 24DC &lt; 2,4W

T2-IP65 plastic housing with three-line display 70x40 mm (WxH), a M16 cable glands and MK-05-K mounting clamps.

Housing dimensions: 126 x 90 x 50 mm / 4.96 x 3.54 x 1.97 in

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## Accessories

**134B9413****Airflow Sensor KLQ CO2 & Air Quality**

DUCT AIR QUALITY (VOC) AND CO2 SENSOR KLQ-CO2-MB

Maintenance-free duct sensor covering air quality (VOC 0...100 %), carbon dioxide (CO2 0...5000 ppm) and atmospheric pressure (hPa). The air quality is detected by a VOC sensor (mixed gas sensor for volatile organic substances) and include an automatic calibration. It determines the loading of the room air due to contaminated gases such as cigarette smoke, body perspiration, exhaled breathing air, solvent vapors, emissions etc. The air contamination can be selected into different sensitivity ranges as low, medium or high. The CO2 measurement is performed using an optical NDIR sensor (non-dispersive infra-red technology), and the detection range is calibrated for standard applications such as monitoring residential rooms and conference rooms. A microprocessor-controlled solution with factory sensor calibration, Modbus RTU connection in a resistant IP65 plastic housing with mounting flange, quick-locking screws and two M16 cable gland for cable connection. International SI units (default) can be changed to imperial (via Modbus).

VOC Sensor: Volatile Organic Compounds sensor (metal oxide) with automatic calibration

VOC measuring range: 0...100 % air quality; referred to calibrating gas

temperature dependence:  $\pm 5$  ppm pro  $^{\circ}\text{C}$  or  $\pm 0,5$  % of measured value pro

$^{\circ}\text{C}$  (whichever is higher) pressure dependence:  $\pm 0.13$  % per mm Hg

Medium: clean air and non-aggressive, non-combustible gases

Power: 24VAC/DC ( $\pm 10\%$ ) 24DC &lt;1,6W

Operation temperature:  $-10...+60$   $^{\circ}\text{C}$  /  $14...+140$   $^{\circ}\text{F}$

T2-IP65 plastic housing two M20 cable glands

Housing dimensions: 126 x 90 x 50 mm / 4.96 x 3.54 x 1.97 in

**134B9412****Airflow Sensor TF65 PT1000 Temperature**

DUCT TEMPERATURE SENSOR TF 65

The TF 65 temperature measuring transducer is a PT1000 class B resistance sensor with passive output. Measuring range from  $-30...+150$   $^{\circ}\text{C}$ . In a resistant IP67 plastic housing and M16 cable gland for cable connection and a straight protective measuring tube and a mounting flange.

Sensor type: PT1000 class B (DIN EN 60751) 1000ohm at  $0^{\circ}\text{C} \pm 0,3$  K

Measuring range:  $-30...+150$   $^{\circ}\text{C}$  /  $-22...+302$   $^{\circ}\text{F}$

Ambient temperature:  $-20...+100$   $^{\circ}\text{C}$  /  $-4...+212$   $^{\circ}\text{F}$

Testing current: &lt; 0.6 mA

Insulating resistance: 100 M#, at  $+20$   $^{\circ}\text{C}$  (500V DC)

Connection type: 2-wire connection

Measuring tube: stainless steel, V4A (1.4571),  $\varnothing 6$  mm, inserted length = 300 mm / 11.8 in

T1-IP67 plastic housing with a M16 cable glands and a mounting flange.

Housing dimensions: 72 x 64 x 37.8 mm / 2.83 x 2.52 x 1.49 in

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## Accessories

**134B9411** [🔗](#)**Wall Sensor AFTF Temp & Humidity**

ON-WALL- HUMIDITY- AND TEMPERATURE SENSORS AFTF-MB

Calibratable outside humidity and temperature sensor AFTF, detect the relative humidity (0...100% RH) and the temperature (-35...+80 °C), including various parameters in the humidity measurement. Applied in clean air and non-aggressive, dust-free environment. With a Modbus connection in a resistant IP65 plastic housing and M20 cable gland for cable connection, with quick-locking screws and an exchangeable plastic sinter filter. International SI units (default) can be changed to imperial (via Modbus).

Measuring range: 0...100 % RH (humidity) / - 35...+80 °C (temperature)

Medium: clean air and non-aggressive, non-combustible gases

Deviation, humidity: typical  $\pm 2.0$  % (20...80 % RH) at +25 °C, otherwise  $\pm 3.0$  %Deviation, temperature: typical  $\pm 0.4$  K at +25 °C /  $\pm 77$  °FZero point offset:  $\pm 10$  % RH (humidity) /  $\pm 5$  °C (temperature)Power: 24VAC ( $\pm 20\%$ ) / 15...36VDC - 24DC &lt;1,2W

Operation temperature: -30...+70 °C / -22...+158 °F

T3-IP65 plastic housing with two M20 cable glands

Housing dimensions: 108 x 78.5 x 43.3 mm / 4.25 x 3.1 x 1.7 in

**134B9410** [🔗](#)**Wall Sensor ATM2 Temperature**

OUTSIDE / WET ROOM TEMPERATURE SENSOR ATM2-MB

Calibratable outside temperature sensor ATM2, PT1000 measure temperature (-50...+150 °C), with Modbus RTU connection, in a resistant IP65 plastic housing with quick-locking screws and M20 cable gland for cable connection. International SI units (default) can be changed to imperial (via Modbus).

Sensor type: PT1000 class B (DIN EN 60751)

Measuring range: - 50...+150°C / -31... +176°F

Deviation: typical  $\pm 0.2$  K at +25 °C /  $\pm 77$  °FZero point offset:  $\pm 10$  °C /  $\pm 50$  °F

Ambient temperature: Measuring transducer -30...+70 °C / -22... +158°F

Medium: clean air and non-aggressive, non-combustible gases

Power: 24VAC ( $\pm 20\%$ ) / 15...36VDC - 24DC &lt;1,2W

Operation temperature: -30...+70 °C / -22...+158 °F

T3-IP65 plastic housing with two M20 cable glands

Housing dimensions: 108 x 78.5 x 43.3 mm / 4.25 x 3.1 x 1.7 in

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**Accessories**

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Image  
coming  
soon**134B9409** **Airflow Sensor 8147 Temp&Humidity&7000Pa**

DUCT HUMIDITY-, TEMPERATURE- AND PRESSURE SENSORS  $\pm 7000\text{Pa}$ -MB  
Maintenance-free duct sensor covering humidity, temperature and pressure in one transducer. Microprocessor-controlled with Modbus RTU connection in a resistant IP65 plastic housing with quick-locking screws and M16 cable gland for cable connection. Including mounting flange to detect the relative humidity (0...100% RH) and the temperature ( $-35\text{...}+80\text{ }^\circ\text{C}$ ) inside a tube, with an exchangeable plastic sinter filter. A differential air pressure (max.  $\pm 7000\text{ Pa}$ ) with connection nozzles for pressure hose ( $\varnothing 6\text{ mm}$ ). The duct sensor is applied in a non-aggressive and dust-free environment and is suitable for installation in ceilings, ducts and devices. International SI units (default) can be switched to Imperial (via Modbus).

Measuring range: 0...100 % RH (humidity) /  $-35\text{...}+80\text{ }^\circ\text{C}$  /  $-31\text{...}+176\text{ }^\circ\text{F}$  (temperature)

Medium: clean air and non-aggressive, non-combustible gases

Deviation, humidity: typical  $\pm 2.0\%$  (20...80 % RH) at  $+25\text{ }^\circ\text{C}/+77\text{ }^\circ\text{F}$ , otherwise  $\pm 3.0\%$

Deviation, temperature: typical  $\pm 0.2\text{ K}$  at  $+25\text{ }^\circ\text{C}$  /  $\pm 0.4\text{ }^\circ\text{F}$  at  $+77\text{ }^\circ\text{F}$

Pressure range:  $\pm 7000\text{ Pa}$

Accuracy: 7000 Pa/28 inWC: typical  $\pm 105\text{ Pa}$  at  $+25\text{ }^\circ\text{C}$  /  $\pm 0.12\text{ inWC}$  at  $+77\text{ }^\circ\text{F}$

Above- # below-pressure: max.  $\pm 50\text{ kPa}$

Power: 24VAC ( $\pm 20\%$ ) / 15...36VDC - 24DC &lt;0,2W

Operation temperature:  $-30\text{...}+70\text{ }^\circ\text{C}$  /  $-22\text{...}+158\text{ }^\circ\text{F}$

Media temperature  $-20\text{...}+50\text{ }^\circ\text{C}$  /  $-4\text{...}+122\text{ }^\circ\text{F}$  IP65 plastic housing two

M16 cable glands

Housing dimensions: 126 x 90 x 50 mm / 4.96 x 3.54 x 1.97 in

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**Accessories**

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Image  
coming  
soon**134B9408** **Airflow Sensor 8148 Temp&Humidity&500Pa**

DUCT HUMIDITY-, TEMPERATURE- AND PRESSURE SENSORS ±500PA-MB  
Maintenance-free duct sensor covering humidity, temperature and pressure in one transducer. Microprocessor-controlled with Modbus RTU connection in a resistant IP65 plastic housing with quick-locking screws and M16 cable gland for cable connection. Including mounting flange to detect the relative humidity (0...100% RH) and the temperature (-35...+80 °C) inside a tube, with an exchangeable plastic sinter filter. A differential air pressure (max. ± 500 Pa) with connection nozzles for pressure hose (Ø 6 mm). The duct sensor is applied in a non-aggressive and dust-free environment and is suitable for installation in ceilings, ducts and devices. International SI units (default) can be switched to Imperial (via Modbus).

Measuring range: 0...100 % RH (humidity) / - 35...+80°C / -31... +176°F (temperature)

Medium: clean air and non-aggressive, non-combustible gases

Deviation, humidity: typical ± 2.0 % (20...80 % RH) at +25°C/+77°F , otherwise ± 3.0 %

Deviation, temperature: typical ± 0.2 K at +25 °C / ± 0.4 °F at +77 °F

Pressure range: ± 500 Pa

Accuracy: 500 Pa/2.0 inWC: typical ± 13 Pa at +25 °C / ± 0.05 inWC at +77 °F

Above- # below-pressure: max. ± 50 kPa

Power: 24VAC (± 20%) / 15...36VDC - 24DC &lt;0,2W

Operation temperature: -30...+70 °C / -22...+158 °F

Media temperature -20...+50 °C / -4...+122 °F IP65 plastic housing two

M16 cable glands

Housing dimensions: 126 x 90 x 50 mm / 4.96 x 3.54 x 1.97 in

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## Accessories

**134B9407** [🔗](#)**Airflow Sensor KFTF Temp & Humidity**

DUCT HUMIDITY- AND TEMPERATURE SENSORS KFTF-MB

Calibratable duct humidity and temperature sensor KFTF-T3 ( $\pm 2.0\%$ ) with Modbus RTU connection, in a resistant IP65 plastic housing with quick-locking screws and M16 cable gland for cable connection and a plastic sinter filter (exchangeable). Including mounting flange to detect the relative humidity (0...100% RH) and the temperature ( $-35...+80\text{ }^{\circ}\text{C}$ ) inside a tube, including various parameters in the humidity measurement. The duct sensor is applied in a non-aggressive and dust-free environment and is suitable for installation in ceilings, ducts and devices.

International SI units (default) can be switched to Imperial (via Modbus).

Measuring range: 0...100 % RH (humidity) /  $-35...+80\text{ }^{\circ}\text{C}$  (temperature)

Medium: clean air and non-aggressive, non-combustible gases

Deviation, humidity: typical  $\pm 2.0\%$  (20...80 % RH) at  $+25\text{ }^{\circ}\text{C}$ , otherwise  $\pm 3.0\%$

Deviation, temperature: typical  $\pm 0.2\text{ K}$  at  $+25\text{ }^{\circ}\text{C}$

Zero point offset:  $\pm 10\%$  RH (humidity) /  $\pm 5\text{ }^{\circ}\text{C}$  (temperature)

Power: 24VAC ( $\pm 20\%$ ) / 15...36VDC - 24DC &lt;1,2W

Operation temperature:  $-30...+70\text{ }^{\circ}\text{C}$  /  $-22...+158\text{ }^{\circ}\text{F}$

T3-IP65 plastic housing with two M20 cable glands

Housing dimensions: 108 x 78.5 x 43.3 mm / 4.25 x 3.1 x 1.7 in

**134B9406** [🔗](#)**Pressure Sensor 7227 2x7000Pa, Analog**DUAL AIR PRESSURE SENSOR  $\pm 7000\text{ Pa}$   $\pm 7000\text{ Pa}$ , ANALOGUE

Dual pressure transmitter with 2x8 switchable measuring ranges and 2 automated analogue output signals in a resistant IP65 plastic housing with quick-locking screws, connection nozzles for pressure hose ( $\varnothing 6\text{ mm}$ ) and a M16 cable gland for cable connection. The pressure measuring transducer automatically detects the required output type and converts the measurands into the required standard signal of 0-10 V or 4...20 mA.

Pressure range selection:  $\pm 7000\text{ Pa}$  - 0...1000Pa / 2000Pa / 3000Pa / 5000Pa / 7000Pa

Accuracy: 7000 Pa typical  $\pm 105\text{ Pa}$

Zero point offset:  $\pm 10\%$  of measuring range

Above- # below-pressure: max.  $\pm 50\text{ kPa}$

Power: 24VAC/DC ( $\pm 10\%$ ) &lt;1,3W,

Output: automatically switching 0-10 V # 4...20 mA

Working resistance:  $R_a$  (ohms) = 25...450 Ohm (at I output)

Load resistance:  $R_L$  &gt; 15 kOhm (at U output)

Operation / Media temperature:  $-20...+50\text{ }^{\circ}\text{C}$  /  $-4...+122\text{ }^{\circ}\text{F}$

T2-IP65 plastic housing with one M16 cable gland

Housing dimensions: 126 x 90 x 50 mm / 4.96 x 3.54 x 1.97 in

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## Accessories



### 134B9405 [↗](#)

#### Pressure Sensor 7229 500/7000Pa, Analog

DUAL AIR PRESSURE SENSOR  $\pm 500\text{Pa}$   $\pm 7000\text{Pa}$ , ANALOGUE

Dual pressure transmitter with 2x8 switchable measuring ranges and 2 automated analogue output signals in a resistant IP65 plastic housing with quick-locking screws, connection nozzles for pressure hose ( $\varnothing$  6 mm) and a M16 cable gland for cable connection. The pressure measuring transducer automatically detects the required output type and converts the measurands into the required standard signal of 0–10 V or 4...20 mA. Pressure range selection:  $\pm 500\text{ Pa} - 0...100\text{Pa} / 200\text{Pa} / 300\text{Pa} / 500\text{Pa}$  Pressure range selection:  $\pm 7000\text{ Pa} - 0...1000\text{Pa} / 2000\text{Pa} / 3000\text{Pa} / 5000\text{Pa} / 7000\text{Pa}$

Accuracy: 500 Pa typical  $\pm 13\text{ Pa}$

Accuracy: 7000 Pa typical  $\pm 105\text{ Pa}$

Zero point offset:  $\pm 10\%$  of measuring range

Above- # below-pressure: max.  $\pm 50\text{ kPa}$

Power: 24VAC/DC ( $\pm 10\%$ ) &lt;1,3W,

Output: automatically switching 0 -10 V # 4...20 mA

Working resistance:  $R_a$  (ohms) = 25...450 Ohm (at I output)

Load resistance:  $R_L$  > 15 kOhm (at U output)

Operation / Media temperature:  $-20...+50\text{ }^\circ\text{C} / -4...+122\text{ }^\circ\text{F}$

T2-IP65 plastic housing with one M16 cable gland

Housing dimensions: 126 x 90 x 50 mm / 4.96 x 3.54 x 1.97 in



### 134B9404 [↗](#)

#### Pressure Sensor 7225 2x500Pa, Analog

DUAL AIR PRESSURE SENSOR  $\pm 500\text{Pa}$   $\pm 500\text{Pa}$ , ANALOGUE

Dual pressure transmitter with 2x8 switchable measuring ranges and 2 automated analogue output signals in a resistant IP65 plastic housing with quick-locking screws, connection nozzles for pressure hose ( $\varnothing$  6 mm) and a M16 cable gland for cable connection. The pressure measuring transducer automatically detects the required output type and converts the measurands into the required standard signal of 0–10 V or 4...20 mA. Pressure range selection:  $\pm 500\text{ Pa} - 0...100\text{Pa} / 200\text{Pa} / 300\text{Pa} / 500\text{Pa}$

Accuracy: 500 Pa typical  $\pm 13\text{ Pa}$

Zero point offset:  $\pm 10\%$  of measuring range

Above- # below-pressure: max.  $\pm 50\text{ kPa}$

Power: 24VAC/DC ( $\pm 10\%$ ) &lt;1,3W,

Output: automatically switching 0 -10 V # 4...20 mA

Working resistance:  $R_a$  (ohms) = 25...450 Ohm (at I output)

Load resistance:  $R_L$  > 15 kOhm (at U output)

Operation / Media temperature:  $-20...+50\text{ }^\circ\text{C} / -4...+122\text{ }^\circ\text{F}$

T2-IP65 plastic housing with one M16 cable gland

Housing dimensions: 126 x 90 x 50 mm / 4.96 x 3.54 x 1.97 in

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Accessories



**134B9402** [🔗](#)

**Pressure Sensor 7247T 2x7000Pa & PT1000**

DUAL AIR PRESSURE SENSOR ±7000PA Temperature drift: ± 0.1 % per °C # °F

Zero point offset: ± 10 % of measuring range

Above- # below-pressure: max. ± 50 kPa / ± 200 inWC

Power: 24VAC (± 20%) &lt;0,2W / 15...36VDC

Operation temperature: -30...+70 °C / -22...+158 °F

Media temperature -20...+50 °C / -4...+122 °F

T2-IP65 plastic housing with two M16 cable glands one M12 for temperature

Housing dimensions: 126 x 90 x 50 mm / 4.96 x 3.54 x 1.97 in



**134B9401** [🔗](#)

**Pressure Sensor 7249T 500/7000Pa & PT1000**

DUAL AIR PRESSURE SENSOR ±500PA Temperature drift: ± 0.1 % per °C # °F

Zero point offset: ± 10 % of measuring range

Above- # below-pressure: max. ± 50 kPa / ± 200 inWC

Power: 24VAC (± 20%) &lt;0,2W / 15...36VDC

Operation temperature: -30...+70 °C / -22...+158 °F

Media temperature -20...+50 °C / -4...+122 °F

T2-IP65 plastic housing with two M16 cable glands one M12 for temperature

Housing dimensions: 126 x 90 x 50 mm / 4.96 x 3.54 x 1.97 in



**134B9400** [🔗](#)

**Pressure Sensor 7245T 2x500Pa & PT1000**

DUAL AIR PRESSURE SENSOR ±500PA Temperature drift: ± 0.1% per °C/°F

Zero point offset: ± 10 % of measuring range

Above-/below-pressure: max. ± 50 kPa / ± 200 inWC

Power: 24VAC (± 20%) &lt;&gt;&lt;&gt;&lt;&gt;0,2W / 15...36VDC

Operation temperature: -30...+70 °C / -22...+158 °F

Media temperature -20...+50 °C / -4...+122 °F

T2-IP65 plastic housing with two M16 cable glands one M12 for temperature

Housing dimensions: 126 x 90 x 50 mm / 4.96 x 3.54 x 1.97 in

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