

**131B8903****FC-202P2K2T4E20H2XGXXXXXXXAXBXXXXX**

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

Customer Service Center

Frequency converter

FC-202P2K2T4E20H2XGXXXXXXXAXBXXXXX

VLT® AQUA Drive FC-202

(P2K2) 2.2 KW / 3.0 HP,

Three phase, 380 - 480 VAC, (E20) IP20 / Chassis

RFI Filter

No brake chopper

Graphical Loc. Cont. Panel

Not coated PCB, No Mains Option

Latest release std. SW.

Frame: A2

No A Option, No B Option

No C1 option, No D option

Other options according to Model code

Model code: FC-202P2K2T4E20H2XGXXXXXXXAXBXXXXX

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**

Gross weight		4.886 Kilogram	
Net weight		4.04 Kilogram	
Volume		21.569 Liter	
EAN		5702427378827	
Product View (Switch)	GLBL	Global (Standard)	
Product Group	FC-	VLT® AQUA Drive FC-	
Series	202	202	Advanced version
Power Rating	P2K2	(P2K2) 2.2 KW / 3.0 HP	
Phase	T	Three phase	
Mains Voltage	4	380 - 480 VAC	
Enclosure	E20	(E20) IP20 / Chassis	Normal cabinet mounting A, B & C Frames
RFI Filter	H2	RFI Filter	H1: Integrated EMC filter. Fulfil EN 55011 Class A1/B and EN/IEC 61800-3 Category 1/2. H2: No extra EMC filter. Fulfil EN 55011 Class A2 and EN/IEC 61800-3 Category 3. H3: Integrated EMC

PRODUCT DETAILS

			filter. Fulfil EN 55011 class A1/B and EN/IEC 61800-3 Category 1/2 (enclosure size A1 only). See Design Guide for specific cable length depending on power size.
Brake - Safe Stop	X	No brake chopper	
LCP	G	Graphical Loc. Cont. Panel	Graphical Local Control Panel (LCP-102)
Coating PCB	X	Not coated PCB	
Mains Option	X	No Mains Option	
Adaptation A	X	Standard Cable Entries	
Adaptation B	X	No adaptation	
Software Release	SXXX	Latest release std. SW.	
Software Language Pack	X	Standard Language Pack	Software
A Option	AX	No A Option	
B Option	BX	No B Option	
C0 Option MCO	CX	No C0 option	
C1 Option	X	No C1 option	
C Option Software	XX	No software option	Configuration software for speed synchronisation between drives
D Option	DX	No D option	
Frame Size	A2	A2	
Typecode Part 1		FC-202P2K2T4E20H2XGX	
Typecode Part 2		XXXXXXXAXBXXXXDX	
Product Catalog	NO_VIEW	NO VIEW	
Power 150% (HO) [KW]	2.2	2.2	
Power 110% (NO) [KW]	2.2	2.2	
Height [mm]	268,0	268,0	
Width w/ no C options [mm]	90,0	90,0	
Width w/ two C options [mm]	150,0	150,0	
Depth [mm]	205,0	205,0	
Depth with Option A/B [mm]	220,0	220,0	
kVA	3.88	3.88	
Power Loss NO [W]	88	88	
Power Loss NO [W]	88	88	
Power Loss HO [W]	88	88	
Power Loss HO [W]	88	88	
Continuous Current (NO) [A]	5.6	5.6	
Intermittent Current (NO) [A]	6.16	6.16	
Continuous Current (NO) [A]	4.8	4.8	
Intermittent Current (NO) [A]	5.28	5.28	
Continuous Current (HO) [A]	5.6	5.6	
Intermittent Current (HO) [A]	8.4	8.4	
Continuous Current (HO) [A]	4.8	4.8	
Intermittent Current (HO) [A]	7.2	7.2	
Calculated Gross Weight [kg]		4.886	
Calculated Net Weight [kg]		4.04	
ECCN EU	Y901	Y901	
ECCN US	3A999.a	3A999.a	
Vendor	ERR01	Cannot Determine Vendor	
Recommended Factory	ERR01	Cannot Determine Vendor	
Modelcode01		FC-202P2K2T4E20H2XGX	

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

PRODUCT DETAILS

Modelcode02	XXXXXXXXAXBXXXXDX
Recommended Plant	ERR01

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

Accessories

**130B7531** [🔗](#)**Mounting Kit f. C Option, 60mm, A2/A3**

VLT® Mounting kit for enclosure sizes A2 and A3.
Must be used when retrofitting 1 pc. of the following MCO options,
together with MCB 113 Extended relay card (Located in MCO slot):
MCO 305 Programmable Motion Controller
MCO 350 Synchronizing Controller
MCO 351 Positioning controller
MCO 360 Salt Controller
MCO 361 Lift Controller
Product group: R



x10

130B7389 [🔗](#)**NEMA 1 Conversion Kit, Top, 10 pcs, A2****130B5645** [🔗](#)**Leakage Current Monitor Kit, A2, A3****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

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

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

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.

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories

**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

**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

**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.

**130B1202** **VLT® DeviceNet MCA 104, coated**

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

**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**

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories

**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.

**130B0185** **Adapter Plate, 395x220mm**

With the adapter plate you can replace a VLT® 5/6/8000 by a FC drivewithout having to drill new holes for the FC drive. This makes it easyand fast to replace a VLT® 5/6/8000, and as there will be no drillingthere will be no swarf harming the electric components.

The following VLT® 5/6/8000 can be mounted on the Adapter Plate130B0185:

IP20 Compact: 200-240Volt VLT5001-5006, 380/500Volt VLT5001-5011

IP20/NM1: 200-240Volt VLT6002-6005, 380/460Volt VLT6002-6011,380-480Volt VLT8006-8011, 550-600Volt VLT 5001-5011, 525-690VoltVLT8002-8011

**130B0184** **Adapter Plate, 395x130mm**

With the adapter plate you can replace a VLT® 5/6/8000 by a FC drive without having to drill new holes for the FC drive. This makes it easy and fast to replace a VLT® 5/6/8000, and as there will be no drilling there will be no swarf harming the electric components.

The following VLT® 5/6/8000 can be mounted on the Adapter Plate 130B0184:

IP20 Book: 200-240Volt VLT5004-5006/VLT6004-6005, 380/500Volt VLT5006-5011,

380-460Volt VLT6006-6011

**130B0183** **Adapter Plate, 395x90mm**

With the adapter plate you can replace a VLT® 5/6/8000 by a FC drive without having to drill new holes for the FC drive. This makes it easy and fast to replace a VLT® 5/6/8000, and as there will be no drilling there will be no swarf harming the electric components. The following

VLT® 5/6/8000 can be mounted on the Adapter Plate 130B0183:

IP20 Book: 200-240Volt VLT5001-5003/VLT6002-6003, 380/500Volt VLT5001-5005, 380-460Volt VLT6002-6005

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories



130B0056

Adapter Plate, 338x279mm

With the adapter plate you can replace a VLT® 3000 by a FC drive without having to drill new holes for the FC drive. This makes it easy and fast to replace a VLT® 3000, and as there will be no drilling there will be no swarf harming the electric components.

It is possible to install one or two FC drives in the same place as one VLT® 3000. Or one FC drive with a full size C Option (e.g. MCO305).

The following VLT® 3000 can be mounted on the Adapter Plate 130B0056:
IP00/21: 220/380/500 Volt VLT3002-3004 with no brake



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



130B1132

IP 21/Type 1 conversion kit, top, A2

This is only the top part of the kit - If you need a kit with both top and bottom please order 130B1122



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



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.



130B1122

IP 21/Type 1 conversion kit, A2

Cover for housing size A2 MCF 101 NEMA1 / IP21

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories

**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

**130B1117** **LCP Mounting Kit, w/ no LCP**

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

**130B1114** **LCP Mounting Kit w/ numerical LCP101, 3m**

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

**130B1113** **lcp panel kit/fc300 fg-lcp panel kit**

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

**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

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories



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



130B1077 [🔗](#)

Blindcover, w/ Danfoss logo, IP55/66

LCP Blindcover IP66



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

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

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories

**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****175U0087** [🔗](#)**Mount. Brack. Footprint, A2, f. 2 br.res**

Back frame A2 for 2 brake resistors

**175U0085** [🔗](#)**Mounting bracket: Footprint, A2**

Back frame A2 for 1 brake resistor

Image
coming
soon

175U0388 [🔗](#)**Mounting brackets: Footprint, K3**

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

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories



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

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

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

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

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 stick).

Product group: R1

Image
coming
soon

134B1992 [🔗](#)

Control Terminals w/ screw connections



130B0295 [🔗](#)

sparepart/terminals accessory bag



130B1022 [🔗](#)

fc-300 spare part/acc. bag a2 +a3 encl.

Image
coming
soon

130B4847 [🔗](#)

extension cable for lcp+communication



134B8814 [🔗](#)

VLT® PROFINET MCA120 coated 5pcs



134B8492 [🔗](#)

Transducer 0-10g, 4-20mA; HS-22B50

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

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories

**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**

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

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories

**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 > 50 kOhm

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

Power: 24VAC/DC (± 10%) 24DC < 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

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

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

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

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

Power: 24VAC/DC ($\pm 10\%$) 24DC <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: < 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

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

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 ± 2.0 % (20...80 % RH) at +25 °C, otherwise ± 3.0 %

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

Zero point offset: ± 10 % RH (humidity) / ± 5 °C (temperature)

Power: 24VAC ($\pm 20\%$) / 15...36VDC - 24DC <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 ± 0.2 K at +25 °C / ± 77 °F

Zero point offset: ± 10 °C / ± 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 <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

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories

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

DUCT HUMIDITY-, TEMPERATURE- AND PRESSURE SENSORS ± 7000 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 ($-35...+80$ °C) inside a tube, with an exchangeable plastic sinter filter. A differential air pressure (max. ± 7000 Pa) with connection nozzles for pressure hose ($\varnothing 6$ 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: ± 7000 Pa
Accuracy: 7000 Pa/28 inWC: typical ± 105 Pa at $+25$ °C / ± 0.12 inWC at $+77$ °F
Above- # below-pressure: max. ± 50 kPa
Power: 24VAC (± 20 %) / 15...36VDC - 24DC <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

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories

Image
coming
soon

134B9408

Airflow Sensor 8148 Temp&Humidity&500Pa

DUCT HUMIDITY-, TEMPERATURE- AND PRESSURE SENSORS ± 500 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 ($-35...+80$ °C) inside a tube, with an exchangeable plastic sinter filter. A differential air pressure (max. ± 500 Pa) with connection nozzles for pressure hose ($\varnothing 6$ 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 <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

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

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 <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 ($\pm 10\%$) <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

For more information, please use this link to visit the product page on Danfoss Product Store 

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

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: $\pm 500\text{ Pa} - 0 \dots 100\text{Pa} / 200\text{Pa} / 300\text{Pa} / 500\text{Pa}$ Pressure range selection: $\pm 7000\text{ Pa} - 0 \dots 1000\text{Pa} / 2000\text{Pa} / 3000\text{Pa} / 5000\text{Pa} / 7000\text{Pa}$

Accuracy: 500 Pa typical $\pm 13\text{ Pa}$ Accuracy: 7000 Pa typical $\pm 105\text{ Pa}$ Zero point offset: $\pm 10\%$ of measuring rangeAbove- # below-pressure: max. $\pm 50\text{ kPa}$ Power: 24VAC/DC ($\pm 10\%$) <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: $-20 \dots +50\text{ }^\circ\text{C} / -4 \dots +122\text{ }^\circ\text{F}$

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: $\pm 500\text{ Pa} - 0 \dots 100\text{Pa} / 200\text{Pa} / 300\text{Pa} / 500\text{Pa}$

Accuracy: 500 Pa typical $\pm 13\text{ Pa}$ Zero point offset: $\pm 10\%$ of measuring rangeAbove- # below-pressure: max. $\pm 50\text{ kPa}$ Power: 24VAC/DC ($\pm 10\%$) <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: $-20 \dots +50\text{ }^\circ\text{C} / -4 \dots +122\text{ }^\circ\text{F}$

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

For more information, please use this link to visit the product page on Danfoss Product Store

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Accessories



134B9402

Pressure Sensor 7247T 2x7000PPa & PT1000

DUAL AIR PRESSURE SENSOR $\pm 7000\text{PA}$ Temperature drift: $\pm 0.1\%$ per $^{\circ}\text{C}$ #
 $^{\circ}\text{F}$

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

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

Power: 24VAC ($\pm 20\%$) <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 $\pm 500\text{PA}$ Temperature drift: $\pm 0.1\%$ per $^{\circ}\text{C}$ #
 $^{\circ}\text{F}$

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

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

Power: 24VAC ($\pm 20\%$) <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 $\pm 500\text{PA}$ Temperature drift: $\pm 0.1\%$ per $^{\circ}\text{C}/^{\circ}\text{F}$

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

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

Power: 24VAC ($\pm 20\%$) <><>>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

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

Danfoss can accept no responsibility for possible errors in catalogs, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without sub-sequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.