



131B0453

FC-302P1K5T5E20H1XGXXXXXXXA0BXCXXXXX

Frequency converter
 FC-302P1K5T5E20H1XGXXXXXXXA0BXCXXXXX
 VLT® AutomationDrive FC-302
 (P1K5) 1.5 KW / 2.0 HP,
 Three phase, 380 - 500 VAC, (E20) IP20 / Chassis
 (H1) RFI Class A1/B (C1)
 No brake chopper
 Graphical Loc. Cont. Panel
 Not coated PCB, No Mains Option
 Latest release std. SW.
 Frame: A2
 PROFIBUS DP MCA 101, No B Option
 No C1 option, No D option

Other options according to Model code

Model code: FC-302P1K5T5E20H1XGXXXXXXXA0BXCXXXXX

The VLT® AutomationDrive represents a single drive concept that controls the entire range of operations from ordinary to servo like applications on any machine or production line.

View Efficiency Data

PRODUCT DETAILS

Gross weight		5.436 Kilogram
Net weight		4.59 Kilogram
Volume		21.569 Liter
EAN		5702427107526
Product View (Switch)	GLBL	Global (Standard)
Product Group	FC-	VLT® AutomationDrive FC-
Series	302	302
Power Rating	P1K5	(P1K5) 1.5 KW / 2.0 HP
Phase	T	Three phase
Mains Voltage	5	380 - 500 VAC
Enclosure	E20	(E20) IP20 / Chassis
RFI Filter	H1	(H1) RFI Class A1/B (C1)
Brake - Safe Stop	X	No brake chopper
LCP	G	Graphical Loc. Cont. Panel
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
A Option	A0	PROFIBUS DP MCA 101
B Option	BX	No B Option
C0 Option MCO	CX	No C0 option
C1 Option	X	No C1 option

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PRODUCT DETAILS

C Option Software	XX	No software option
D Option	DX	No D option
Frame Size	A2	A2
Typecode Part 1		FC-302P1K5T5E20H1XGX
Typecode Part 2		XXXXXXXXA0BXCXXXXX
Product Catalog	NO_VIEW	NO VIEW
Power 160% (HO) [KW]	1.5	1.5
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	2.84	2.84
Power Loss HO [W]	62	62
Power Loss HO [W]	62	62
Continuous Current (HO) [A]	4.1	4.1
Intermittent Current (HO) [A]	6.56	6.56
Continuous Current (HO) [A]	3.4	3.4
Intermittent Current (HO) [A]	5.44	5.44
Calculated Gross Weight [kg]		5.436
Calculated Net Weight [kg]		4.59
ECCN EU	Y901	Y901
ECCN US	3A999.a	3A999.a
Vendor	ERR01	Cannot Determine Vendor
Recommended Factory	ERR01	Cannot Determine Vendor
Modelcode01		FC-302P1K5T5E20H1XGX
Modelcode02		XXXXXXXXA0BXCXXXXX
Recommended Plant	ERR01	ERR01

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

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: 220/380/500Volt VLT3002-3004 with no brake

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Accessories

**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

**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

**130B0185** [🔗](#)**Adapter Plate, 395x220mm**

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 130B0185:

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, 525-690Volt VLT8002-8011

**130B0295** [🔗](#)**sparepart/terminals accessory bag****130B1022** [🔗](#)**fc-300 spare part/acc. bag a2 +a3 encl.****130B1070** [🔗](#)**RS485 plug, FC series, 10 pcs**

10pcs RS485 connectors for FC-series.

Product group: R

**130B1071** [🔗](#)**6 Pole Connector, FC series, 10 pcs**

6-pole spring cage connectors 10 pcs

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

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Accessories



130B1077 [🔗](#)
Blindcover, w/ Danfoss logo, IP55/66
 LCP Blindcover IP66



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



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



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.



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



130B1112 [🔗](#)
Sub-D9 Adapter kit, A1, A2, A3
 SUB-D9 plug adapter for FC 100 and FC 300. Allows the use of SUB-D9 connectors at the Profibus DP interface.



130B1113 [🔗](#)
LCP Mounting Kit w/ graphical LCP102, 3m
 The kit includes graphical LCP, fasteners, 3m cable and gasket.



130B1114 [🔗](#)
LCP Mounting Kit w/ numerical LCP101, 3m
 The kit includes numerical LCP, fasteners, 3m cable and gasket.

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Accessories



130B1115 [🔗](#)

VLT® Encoder Input MCB 102, uncoated

Offers the possibility to connect various types of incremental and absolute encoders. The connected encoder can be used for closed-loop speed control as well as closed-loop flux motor control.



130B1117 [🔗](#)

LCP Mounting Kit, w/ no LCP

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



130B1120 [🔗](#)

VLT® Safe PLC I/O MCB 108, uncoated

Connection converter for FC 300 with control input for a safe stop. Allows secure connection. Output modules with diagnostic pulse (Cross-circuit monitoring).



130B1122 [🔗](#)

IP 21/Type 1 conversion kit, A2

Cover for housing size A2 MCF 101 NEMA1 / IP21



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.



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



130B1127 [🔗](#)

VLT® Resolver Input MCB 103, uncoated

Enables connection of a resolver to provide speed feedback from the motor. Spring loaded connection.



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

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

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Accessories



130B1134

VLT® Motion Control MCO 305, uncoated

Integrated and programmable motion controller for VLT® AutomationDrive FC 301 and FC 302

- Adds additional functionality and flexibility as it is a freely programmable module
- Optimized for all types of positioning and synchronization applications
- Make your own program specially adapted to your application

Contains:

- synchronization (electronic shaft), positioning and electronic cam control
- 2 inputs support both stepwise and absolute encoders
- 1 encoder output (virtual master function)

10 digital inputs

8 digital outputs

- Sends and receives data via fieldbus interface (requires fieldbus Option)
- PC software for programming and commissioning.

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

130B7530 - Mounting kit for enclosures A2 and A3

130B7531 - Mounting kit for MCO Option, together with MCB 113, in enclosures A2 and A3.

130B1413 - Mounting kit for enclosure B3

130B1414 - Mounting kit for MCO Option, together with MCB 113, in enclosure B3

130B7532 - Mounting kit for enclosure A5

130B7533 - Mounting kit for all enclosures B, C, D, E and F (B3 excepted)

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



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



130B1152

VLT® Synchronizing Contr. MCO350, unctd

Expands the functional properties of the VLT® AutomationDrive in synchronizing applications, and replaces traditional mechanical solutions. Speed synchronizing. Position (angle) synchronizing with or without marker correction. Online adjustable gear ratio. Online adjustable position (angle) offset. Encoder output with virtual master function for synchronization of multiple followers. Control via I/Os or fieldbus. Home function. Configuration as well as read-out of status and data via the Local Control Panel of the drive.

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

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Accessories

**130B1153** [🔗](#)**VLT® Position Controller MCO351, unctd**

Extends the functional characteristics of the frequency converter in positioning applications

- Direct positioning via fieldbus, relative positioning, absolute positioning and touch probe positioning

- End stop handling (software and hardware)

- Mechanical brake handling (programmable hold delay)

Error handling

- Jog speed / manual operation

- None for programming, as it is pre-programmed

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

130B7530 - Mounting kit for enclosures A2 and A3

130B7531 - Mounting kit for MCO Option, together with MCB 113, in enclosures A2 and A3

130B1413 - Mounting kit for enclosure B3

130B1414 - Mounting kit for MCO Option, together with MCB 113, in enclosure B3

130B7532 - Mounting kit for enclosure A5

130B7533 - Mounting kit for all enclosures B, C, D, E and F (B3 excepted)

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

**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.

**130B1170** [🔗](#)**LCP Panel Mounting Kit**

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

**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.

**130B1203** [🔗](#)**VLT® Encoder Input MCB 102, coated**

Offers the possibility to connect various types of incremental and absolute encoders. The connected encoder can be used for closed-loop speed control as well as closed-loop flux motor control.

**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.

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

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Accessories

**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

**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

**130B1220** [🔗](#)**VLT® Safe PLC I/O MCB 108, coated**

Increases security and helps you meet requirement security levels - VLT® AutomationDrive FC 302 has a safety input based on a single pole 24 V DC input - Security in a cost-effective way Possibility of connection to two conductor safety system Possibility to interrupt on the plus or minus side without disturbing the sensor signal

**130B1227** [🔗](#)**VLT® Resolver Input MCB 103, coated**

Resolver extension for FC 300. Enables the connection of the following Resolver types: Input voltage: 4..8 Vrms Input frequency: 2.5..15 kHz Number of resolver poles: 2 or 4

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

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Accessories

**130B1234** **VLT® Motion Control MCO 305, coated**

Integrated and programmable motion controller for VLT® AutomationDrive FC 301 and FC 302

- Adds additional functionality and flexibility as it is a freely programmable module
- Optimized for all types of positioning and synchronization applications
- Make your own program specially adapted to your application

Contains:

- synchronization (electronic shaft), positioning and electronic cam control
- 2 inputs support both stepwise and absolute encoders
- 1 encoder output (virtual master function) 10 digital inputs
- 8 digital outputs
- Sends and receives data via fieldbus interface (requires fieldbus option)
- PC software for programming and commissioning Remember to order the Mounting kit if the above MCO option is required retrofitted.

130B7530 - Mounting kit for enclosures A2 and A3

130B7531 - Mounting kit for MCO Option, together with MCB 113, in enclosures A2 and A3

130B1413 - Mounting kit for enclosure B3

130B1414 - Mounting kit for MCO Option, together with MCB 113, in enclosure B3

130B7532 - Mounting kit for enclosure A5

130B7533 - Mounting kit for all enclosures B, C, D, E and F (B3 excepted) 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

**130B1252** **VLT® Synchronizing Ctrl. MCO 350, ctd**

MCO 350 - synchronous controller Based on the MCO 305 prefabricated controller for Synchronization tasks. The adjustment takes place through parameter settings. Specific Programming skills are not required.

- 2 encoder inputs, both for incremental as well as absolute encoder
- 1 encoder output (virtual master function)
- 10 additional digital inputs
- 8 additional digital outputs
- fieldbus Communication (requires fieldbus card) with reinforced coating

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

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Accessories

**130B1253** [🔗](#)**VLT® Position Controller MCO 351, ctd**

Extends the functional characteristics of the frequency converter in positioning applications

- Direct positioning via fieldbus, relative positioning, absolute positioning and touch probe positioning

- End stop handling (software and hardware)

- Mechanical brake handling (programmable hold delay)

Error handling

- Jog speed / manual operation

- None for programming, as it is pre-programmed

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

130B7530 - Mounting kit for enclosures A2 and A3

130B7531 - Mounting kit for MCO Option, together with MCB 113, in enclosures A2 and A3

130B1413 - Mounting kit for enclosure B3

130B1414 - Mounting kit for MCO Option, together with MCB 113, in enclosure B3

130B7532 - Mounting kit for enclosure A5

130B7533 - Mounting kit for all enclosures B, C, D, E and F (B3 excepted)

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

**130B1264** [🔗](#)**VLT® Extended Relay Card MCB 113, ctd**

Adds 7 digital inputs and 2 analog outputs for increased flexibility. 4 SPDT relays. Meets NAMUR recommendations. Galvanic isolation capability.

**130B1266** [🔗](#)**VLT MCB 115 Programmable I/O, coated**

VLT® MCB 115 programmable I / O, coated

**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

**130B1383** [🔗](#)**acc. bag multipack 5 pc frame A2/3**

Krones acc. bag multipack 5pcs for A2/3-frame.

**130B1387** [🔗](#)**5xMCB107 24VDC no coat w.out mount brack**

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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



130B3280 [🔗](#)

VLT® Safe option MCB 150, coated

Safety modules enable machines to interact intelligently with operators to increase safety, reduce system costs, improve flexibility and increase productivity.

VLT® MCB 15x Safe options provide an intelligent, user-friendly solution to meet the IEC 61800-5-2 functional safety standard and helps to reduce cabling.

The new safety module is certified according to ISO 13849-1 PL d Category 3 and SIL 2 according to IEC 61508.

Image coming soon

130B3290 [🔗](#)

VLT® Safe option MCB 151, coated

VLT® Safe option MCB 151, painted for HTL feedback, can be used up to PL d or SIL 2

Image coming soon

130B4847 [🔗](#)

extension cable for lcp+communication



130B5601 [🔗](#)

VLT® DeviceNet converter MCA194 coated

VLT® DeviceNet converter MCA194 coated



130B7145 [🔗](#)

VLT® SALT Controller MCO 360



x10

130B7389 [🔗](#)

NEMA 1 Conversion Kit, Top, 10 pcs, A2

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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



130B7635 [🔗](#)

VLT® Lift Controller MCO 361

VLT® Motion Control MCO 305 with special software for lift application



130B9860 [🔗](#)

VLT® Safety Option MCB152, coated

Safety modules enable machines to interact intelligently with operators to increase safety, reduce system costs, improve flexibility and increase productivity. VLT® Safety Option MCB152 provides an intelligent, user-friendly solution to meet the IEC 61800-5-2 functional safety standard and helps to reduce cabling. MCB152 enables activation of the Safe Torque Off (STO) irrespective of where a hazard occurs. The new safety module is certified according to ISO 13849-1 PL d Category 3 and SIL 2 according to EN IEC 61508. The combination of VLT® Safety Option MCB152, PROFINET fieldbus option MCA120, and the control card of the VLT® AutomationDrive constitutes a PROFIsafe device.

Image coming soon

134B1992 [🔗](#)

Control Terminals w/ screw connections



134B5223 [🔗](#)

Remote LCP unit, 3m

Remote mounting kit for LCP with cover for outdoor mounting with 3 m (10 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

Image coming soon

134B5225 [🔗](#)

Remote LCP unit, 10m

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

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Accessories

**134B6544** [🔗](#)**Real Time Clock D slot option MCB117**

The VLT® Real-time clock option MCB 117 option provides advanced data- logging functionality to the following drives

VLT® HVAC Drive FC 102
 VLT® Refrigeration Drive FC 103
 VLT® Aqua Drive FC 202
 VLT® Automation Drive FC 301/FC 302

Image
coming
soon

134B6883 [🔗](#)**VLT Progr. Contr. MCB 301, coated****175N2584** [🔗](#)**VLT® EtherNet/IP Modbus TCP gateway**

Image
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175U0009 [🔗](#)**Mounting bracket Kit, 216 x 30 x 18mm**

Mounting angle for flatpack resistor 200W

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

Back frame A2 for 1 brake resistor

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

Back frame A2 for 2 brake resistors

Image
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175U0388 [🔗](#)**Mounting brackets: Footprint, K3****185B0011** [🔗](#)**FC-302 Demo Case - 120 Vac Supply**

Elevate your sales presentations and on-site training with this high-impact, portable VFD demo kit. Showcasing the Danfoss VLT® FC 302 drive, this suitcase provides a dynamic, hands-on experience for demonstrating the benefits of variable frequency drives in motor control. The integrated flywheel and controls simulate a mechanical load, offering a realistic, visual representation of VFD capabilities. 120VAC Supply (Standard outlet in North America) Dimensions: 24.75 in. x 19.50 in. x 12 in. (63 cm x 50 cm x 30 cm)

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

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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
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soon**134B8497** [🔗](#)**Cable assy, M12 female connec.10m screen****134B9400** [🔗](#)**Pressure Sensor 7245T 2x500Pa & PT1000**DUAL AIR PRESSURE SENSOR ± 500 PA Temperature drift: $\pm 0.1\%$ per $^{\circ}\text{C}/^{\circ}\text{F}$ Zero point offset: $\pm 10\%$ of measuring rangeAbove-/below-pressure: max. ± 50 kPa / ± 200 inWCPower: 24VAC ($\pm 20\%$) <0,2W / 15...36VDCOperation temperature: $-30...+70$ $^{\circ}\text{C}$ / $-22...+158$ $^{\circ}\text{F}$ Media temperature $-20...+50$ $^{\circ}\text{C}$ / $-4...+122$ $^{\circ}\text{F}$

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 ± 500 PA Temperature drift: $\pm 0.1\%$ per $^{\circ}\text{C} \# ^{\circ}\text{F}$ Zero point offset: $\pm 10\%$ of measuring rangeAbove- # below-pressure: max. ± 50 kPa / ± 200 inWCPower: 24VAC ($\pm 20\%$) <0,2W / 15...36VDCOperation temperature: $-30...+70$ $^{\circ}\text{C}$ / $-22...+158$ $^{\circ}\text{F}$ Media temperature $-20...+50$ $^{\circ}\text{C}$ / $-4...+122$ $^{\circ}\text{F}$

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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Accessories

**134B9402** [↗](#)**Pressure Sensor 7247T 2x7000Pa & 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. $\pm 50\text{ kPa}$ / $\pm 200\text{ inWC}$

Power: 24VAC ($\pm 20\%$) <0,2W / 15...36VDC

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

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

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

**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 ($\varnothing 6\text{ mm}$)
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: $\pm 500\text{ Pa} - 0...100\text{Pa} / 200\text{Pa} / 300\text{Pa} / 500\text{Pa}$

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 ($\pm 10\%$) <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

**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

**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 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: $\pm 7000\text{ Pa} - 0 \dots 1000\text{Pa} / 2000\text{Pa} / 3000\text{Pa} / 5000\text{Pa} / 7000\text{Pa}$ 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

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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 <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

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soon**134B9408****Airflow Sensor 8148 Temp&Humidity&500Pa**DUCT HUMIDITY-, TEMPERATURE- AND PRESSURE SENSORS $\pm 500\text{ Pa}$ -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 ($-35...+80\text{ }^{\circ}\text{C}$) inside a tube, with an exchangeable plastic sinter filter. A differential air pressure (max. $\pm 500\text{ Pa}$) 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) / $-35...+80\text{ }^{\circ}\text{C}$ / $-31... +176\text{ }^{\circ}\text{F}$ (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: $\pm 500\text{ Pa}$

Accuracy: 500 Pa/2.0 inWC: typical $\pm 13\text{ Pa}$ at $+25\text{ }^{\circ}\text{C}$ / $\pm 0.05\text{ inWC}$ at $+77\text{ }^{\circ}\text{F}$ Above- #

below-pressure: max. $\pm 50\text{ kPa}$ Power: 24VAC ($\pm 20\%$) / 15...36VDC - 24DC <0,2W

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

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

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

DUCT HUMIDITY-, TEMPERATURE- AND PRESSURE SENSORS ±7000PA-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 (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: ± 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

**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 (± 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

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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 ± 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 (± 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

**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 °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°C ± 0,3 K

Measuring range: –30...+150 °C/ –22...+302 °F

Ambient temperature: –20...+100 °C / –4...+212 °F

Testing current: < 0.6 mA

Insulating resistance: 100 M#, at +20 °C (500V DC)

Connection type: 2-wire connection

Measuring tube: stainless steel, V4A (1.4571), Ø 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

**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

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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

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