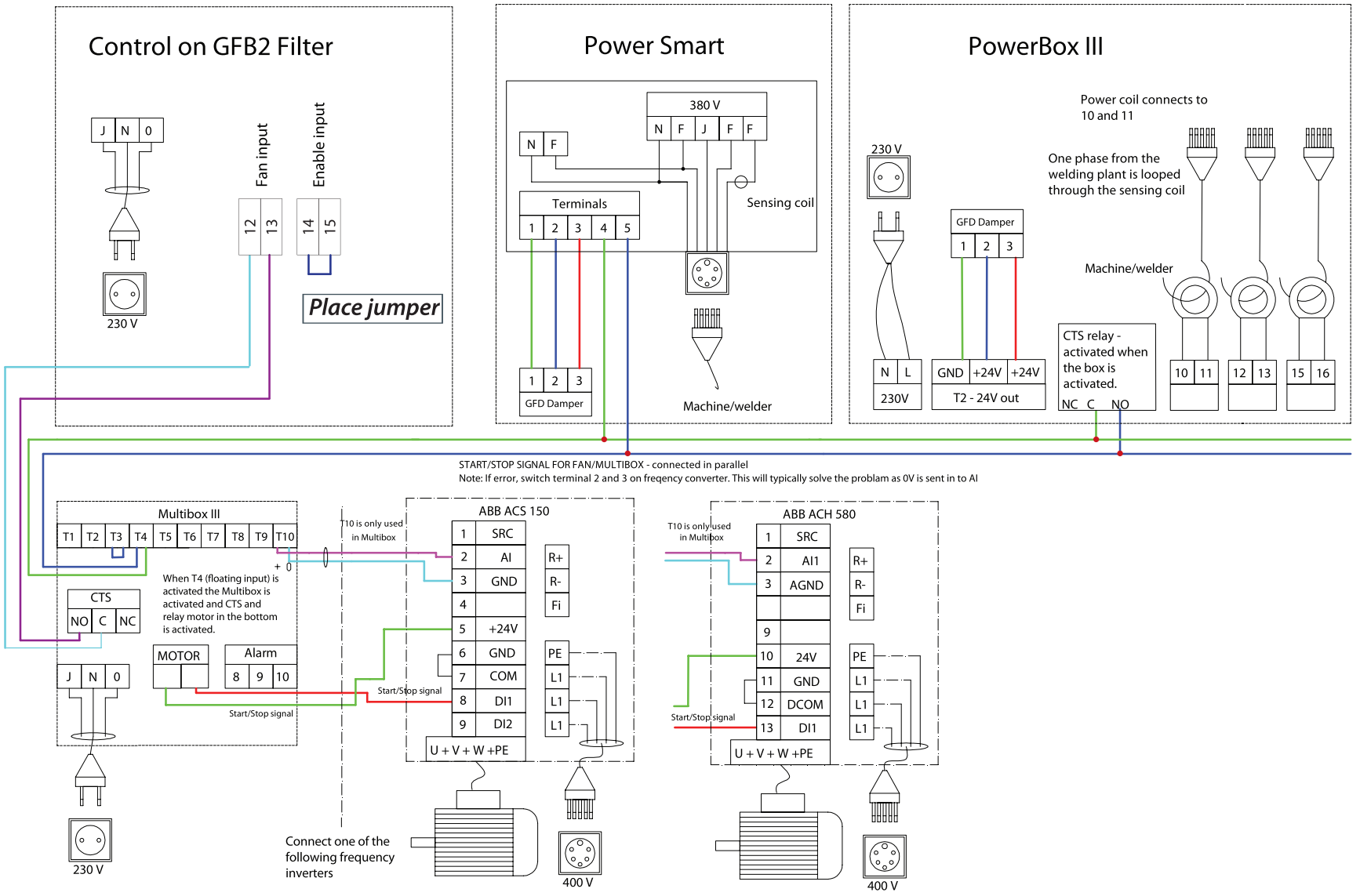

Adjusting frequency inverter:
See manual - important parameters to adjust:

Motordata: Typically parameter group 99
Ramp up/down: Typically parameter group 22
Frequency Max/Min: Typically parameter group 20 and11

OBS - IMPORTANT - ACS 150
Jumper on the bottom (S1) must be switched from "I" to "U" This will change output from current to voltage.
Remember to bridge GND and COM.

Adjusting Multibox III::
Quickguide - also see manual
P0: Version selector - select 530 (most common)
P1: Adjustment set point [Pa]
P2: Min. Alarm limits [s] at too low pressure
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AUTOMATICS

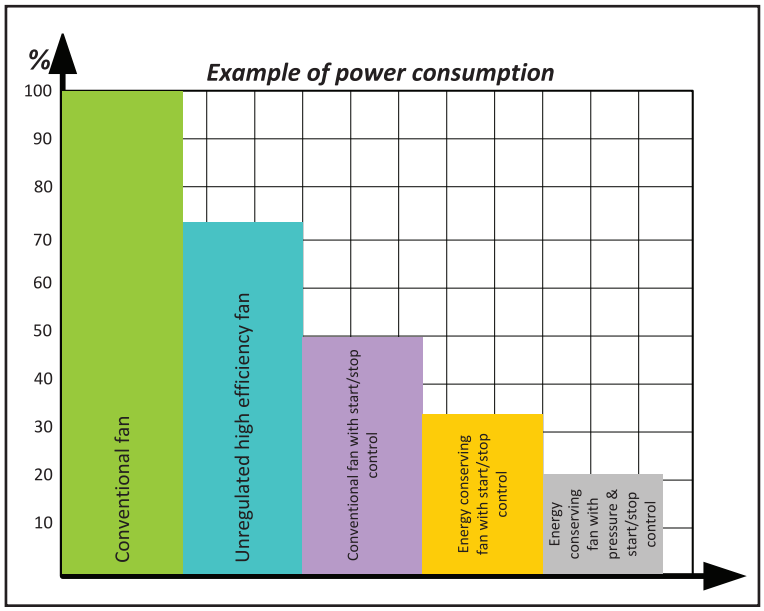
GEOVENT offers a wide range of options for ventilation and extraction controls.

Airbox
Alarm transmitter - meets the requirements of the Danish Working Environment Authority and makes the user aware in case of failure of the ventilation unit.

LWS Control panel
Automatic start / stop of ventilation unit. Saves energy and increases comfort for the employees.

Multibox
Control of airflow by pressure. Always adapt to the correct level. This reduces energy consumption significantly.

PowerSmart II / Powerbox III
Ensures that there is always extraction when needed. It turns off automatically when the process stops. This means an insignificant economic gain as heated air is not extracted unnecessarily out of the building, unnecessary noise is reduced and the comfort of the operator is increased.
Win, Win!



Energy saving automatics

Save money on electricity and heating

Studies show that most point extraction installations are only used efficiently 5 - 20 % of the time during a working day. As a result there are substantial savings by optimizing use of the installation.
Geovent offers several solutions helping you to save on electricity and heating. Normally the Return-of-investment is within 1 - 3 years.

Fast action motor damper - GFD

Normal motor dampers does not turn fast enough for use with point extraction as the pollution starts instantly.

Geovents GFD fast turning damper opens in just one second and secures instant and efficient extraction.
24 V AC/DC On/off or modulating via 0-10V transformer or Powersmart/Powerbox.

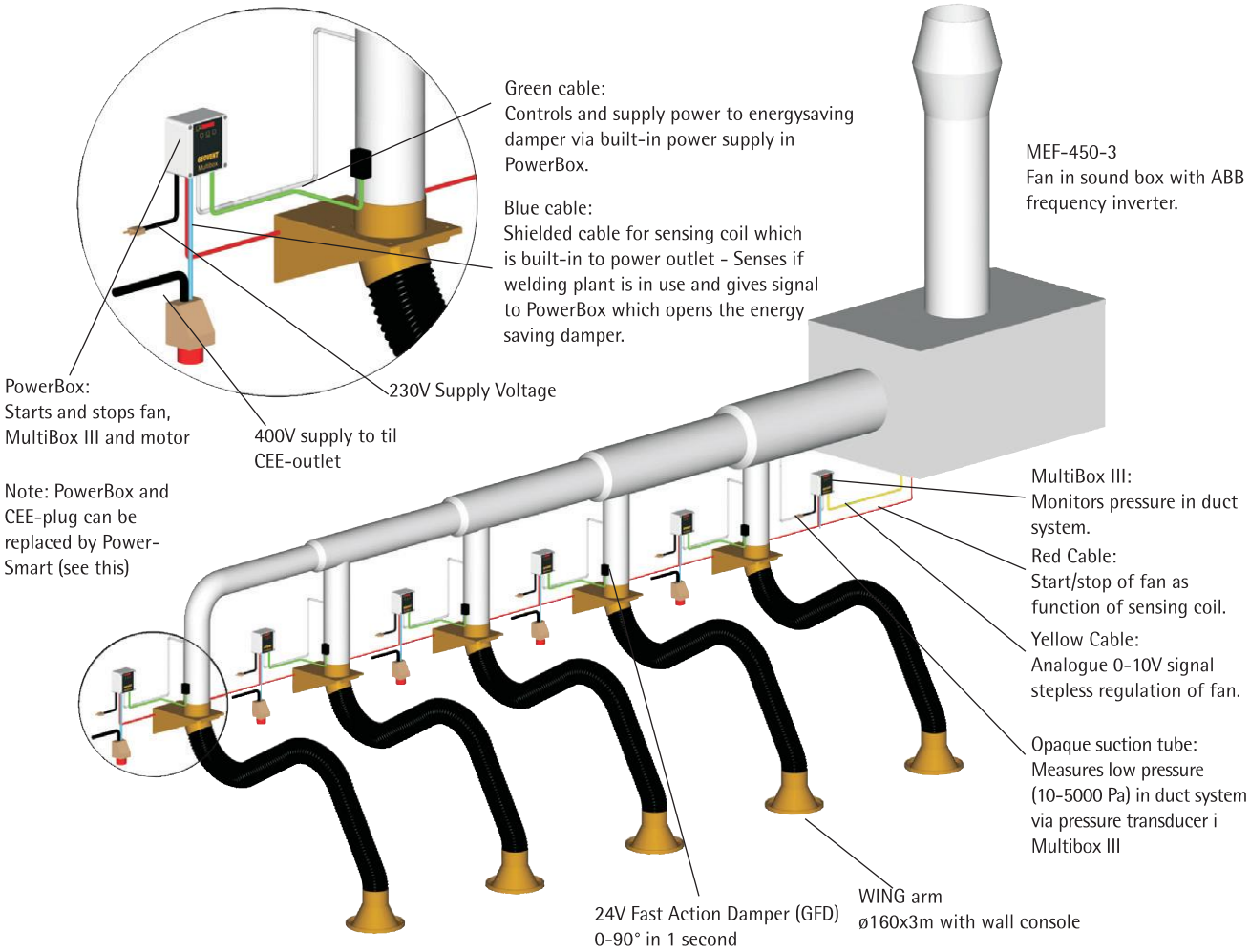
Control type	Exhaust gas	Welding smoke	Grind dust	Oil mist
1 Point of extraction	Start/stop	Start/stop	Start/stop	Start/stop
2-4 Point of extraction	Start/stop	Pressure control	Start/stop	Start/stop
5-8 Point of extraction	Start/stop	Pressure control	Pressure control	Pressure control
9-12 Point of extraction	Start/stop	Pressure control	Pressure control	Pressure control
> 12 Point of extraction	Pressure control	Pressure control	Pressure control	Pressure control

MULTIBOX

PROVEN DESIGN
GEOVENT MultiBox III is a 5th generation control unit, based on the latest microprocessor technology.

SEVERAL OPTIONS IN ONE BOX
GEOVENT MultiBox III can be used for pressure gauging, control, regulation and alarm surveillance in installations for process ventilation in the pressure range 10-5000 Pa.

EASY TO USE
MultiBox III is particularily suitable for dynamic pressure regulation in installations with regulation dampers and/or with fans with frequency inverters.
The desired pressure or flow (differential pressure) is entered as set-point and the built-in regulator will adjust damper or frequency inverter. If the regulation does not maintain pressure or flow within the predefined limits, the alarm is activated.



Art. No.	Description
13-700	MultiBox III is suitable for pressure regulation (PID), measuring, control and monitoring (with alarm) of a system for process ventilation. Choose range: 10-1000Pa or 10-5000Pa. 3 outputs and 3 inputs in Sumbox. Capable of controlling several fans and regulate after 3 setpoints. Including service alarm, red alarm light and siren.
13-700A	MultiBox for high vacuum 30kPa

13-710	AirBox III 10-5000 Pa ventilation monitor with built-in pressure transmitter, monitoring and alarm for process extraction. Complies with the requirements of the Danish Working Environment Authority. Including service alarm, red alarm light and siren.
13-710A	AirBox for high vacuum 30kPa

13-730	AirBox Lite 500-2000 Pa ventilation guard, monitoring and alarm for process extraction. Complies with the requirements of the Danish Working Environment Authority. Red and green control light, no siren.
13-728	AirBox Lite 20-300Pa.
13-729	AirBox Lite 100-1000Pa.
13-727	AirBox Lite HV 30kPa

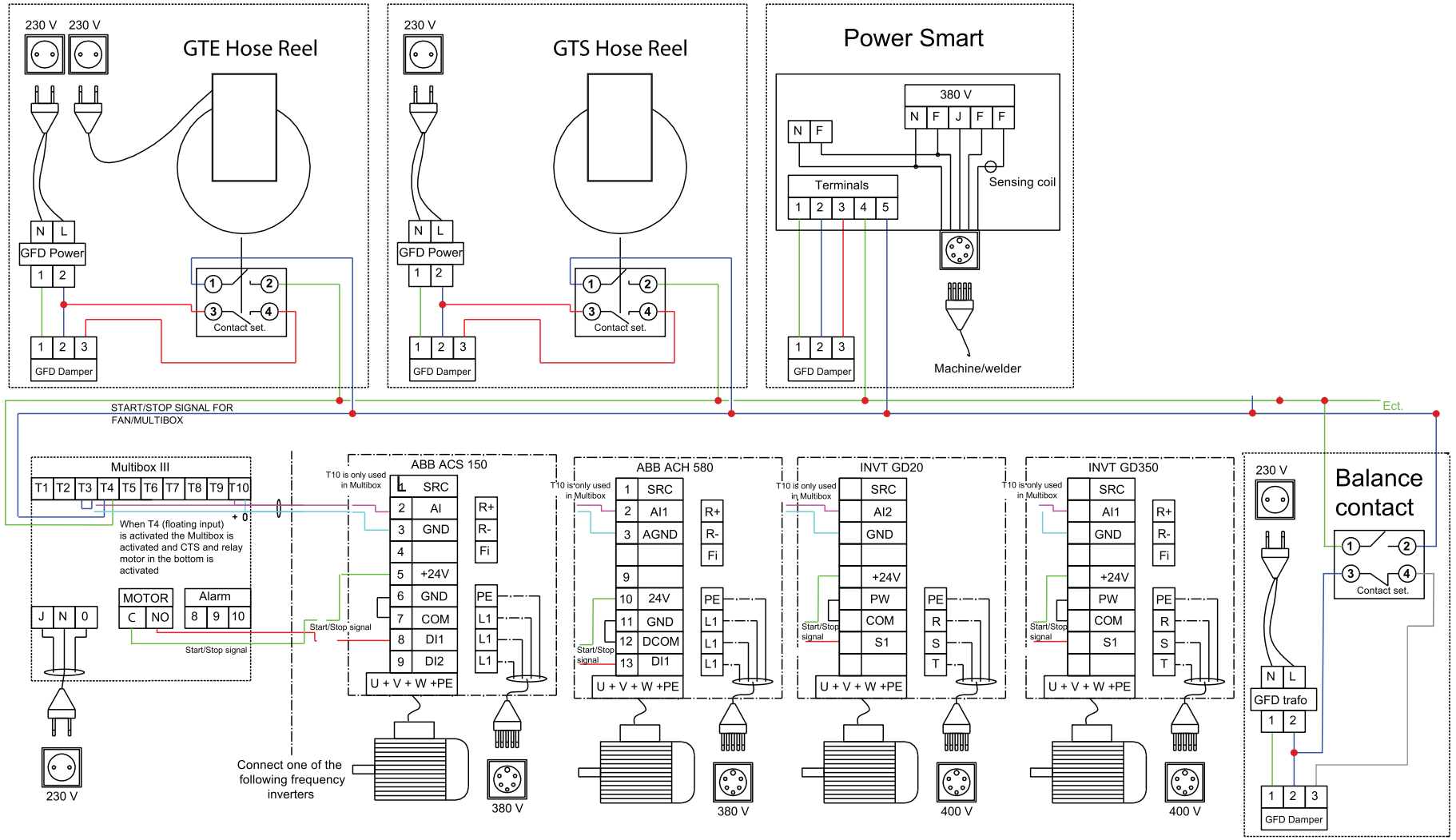
13-102	Suction tube with mounting kit - 10 m ø6 mm

13-080	Red external alarm light 1x230V
13-081	External siren 1x230V – 100 dB(A)

PowerSmart II - for connection of welding plant. Sends a signal to the damper, when the welder is turned on. Incl. self-adjusting, active flux sensor = immune to noise. Suitable for new installations. 2 x relay output and 24V transformer.	
13-059	PowerSmart II CEE 16A
13-058	PowerSmart II CEE 32A
13-058A	PowerSmart II CEE 63A

PowerBox III - for start/stop of fan and GFD motor damper. The PowerBox is supplied with 3 inputs which can be connected to sensing coils. 18W 24V DC power supply for GFD motor damper.	
13-057	PowerBox III, sensing coil not included
13-047	Sensing coil for PowerBox. Register if welding plant, angle grinder or other equipment is in use and signals the PowerBox. The connected equipment must have a power consumption in excess of 700W.
13-047A	Flux sensor for PowerBox. Must be used with equipment that does not comply with the EMC Directive.

www.geovent.com - e-mail: salg@geovent.dk - Phone.: (+45) 8664 2211



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Automatics

Control panel LWS-2 for automatic start/stop of fan incl. circuit breaker. Optionally supplied with built-in timer, so the fan can run after the start signal is shut off.	
Art. No.	**Description**
19-080	Control panel LWS-2 0,8-2,7A
19-081	Control panel LWS-2 0,8-2,7A with transformer and timer delay
19-082	Control panel LWS-2 1,9-6,3A
19-083	Control panel LWS-2 1,9-6,3A with transformer and timer delay
19-084	Control panel LWS-2 5,7-16A
19-085	Control panel LWS-2 5,7-16A with transformer and timer delay

Fan starter incl. motor guard and 24V power supply

Control panel LW for automatic start/stop of fan incl. circuit breaker. The control panel can e.g. be used for emergency vehicles.	
Art. No.	**Description**
19-088	Control panel 1,9-6,3A with timer
19-087	Control panel 5,7-18,9A with timer

External ABB frequency inverters

Affordable external frequency inverter incl. EMC radio noise filter. Built-in display and pot meter in front. We recommend installing a 300mA RCD in front of the inverter.	
Art. No.	**Description**
19-160	ACS 150 1x230V 0,37kW IP20
19-161	ACS 150 1x230V 0,75kW IP20
19-162	ACS 150 1x230V 1,1kW IP20
19-163	ACS 150 1x230V 1,5kW IP20
19-164	ACS 150 1x230V 2,2kW IP20
19-165	ACS 150 3x380-480V 0,37kW IP20
19-166	ACS 150 3x380-480V 0,55kW IP20
19-167	ACS 150 3x380-480V 0,75kW IP20
19-168	ACS 150 3x380-480V 1,1kW IP20
19-169	ACS 150 3x380-480V 1,5kW IP20
19-170	ACS 150 3x380-480V 2,2kW IP20
19-171	ACS 150 3x380-480V 3,0kW IP20
19-172	ACS 150 3X380-480V 4,0kW IP20

External ABB frequency inverters

High End external frequency inverter incl. EMC radio noise filter, incl. Assistant control panel.
We recommend installing a 300mA RCD in front of the inverter.

Art. No.	Description
19-450	ACH 580 3X380-480V 0,75kW IP55
19-451	ACH 580 3X380-480V 1,1kW IP55
19-452	ACH 580 3X380-480V 1,5kW IP55
19-453	ACH 580 3X380-480V 2,2kW IP55
19-454	ACH 580 3X380-480V 3kW IP55
19-455	ACH 580 3X380-480V 4kW IP55
19-456	ACH 580 3X380-480V 5,5kW IP55
19-457	ACH 580 3X380-480V 7,5kW IP55
19-458	ACH 580 3X380-480V 11kW IP55
19-459	ACH 580 3X380-480V 15kW IP55
19-460	ACH 580 3X380-480V 18,5kW IP55
19-461	ACH 580 3X380-480V 22kW IP55

GeoDrive GD20

Frequency inverter for fan regulation. Recommended for use with GEOVENT MultiBox. Purchase of WIFI and Bluetooth modules is possible.
Constructed in hard dark plastic (IP20), incl. control panel.
NB: We recommend installing a 300mA RCD.

Art. No.	Description
19-180	GeoDrive GD20 0,4 kW, 1X230 V, IP20
19-181	GeoDrive GD20 0,75 kW, 1X230 V, IP20
19-182	GeoDrive GD20 1,5 kW, 1X230 V, IP20
19-183	GeoDrive GD20 2,2 kW, 1X230 V, IP20
19-184	GeoDrive GD20 0,75 kW, 3X380-440 V, IP20
19-185	GeoDrive GD20 1,5 kW, 3X380-440 V, IP20
19-186	GeoDrive GD20 2,2 kW, 3X380-440 V, IP20
19-187	GeoDrive GD20 4,0 kW, 3X380-440 V, IP20

GeoDrive GD350

Frequency inverter for fan regulation. Recommended for use with GEOVENT MultiBox. Purchase of WIFI and Bluetooth modules is possible.
Constructed in black painted steel (IP55), incl. control panel.
NB: We recommend installing a 300mA RCD.

Art. No.	Description
19-480	GeoDrive GD350 4,0 kW, 3X380-440 V, IP55
19-481	GeoDrive GD350 5,5 kW, 3X380-440 V, IP55
19-482	GeoDrive GD350 7,5 kW, 3X380-440 V, IP55
19-483	GeoDrive GD350 11,0 kW, 3X380-440 V, IP55
19-484	GeoDrive GD350 15,0 kW, 3X380-440 V, IP55
19-485	GeoDrive GD350 18,5 kW, 3X380-440 V, IP55
19-486	GeoDrive GD350 22,0 kW, 3x380-440 V, IP55
19-487	GeoDrive GD350 30,0 kW, 3x380-440 V, IP55
19-488	GeoDrive GD350 37,0 kW, 3x380-440 V, IP55
19-489	GeoDrive GD350 45,0 kW, 3x380-440 V, IP55

Accessories for ABB frequency inverters

Art. No.	Description
97-002	External pot meter 10 kΩ. Speed adjustment 0-100%
19-285	Steel wall cupboard for ACS150 400x300x200mm. (HxWxD) With noise insulation for the frequency inverter. Incl. cooling fan and mesh.

GeoDrive

Small range external frequency inverter, IP54, for control of AC motors.
Supply: 1x230V. Output: 1x230V or 3x230V 50Hz. To be controlled via 0-10V signal.

Art. No.	Description
19-300	GeoDrive E1045 - 0,37kW
19-301	GeoDrive E1045 - 0,75kW
19-302	GeoDrive E1045 - 1,5kW

Motor damper (0 to 90° = 1 sec.)

Art. No.	Description
61-091	Motor damper GFD-80
61-092	Motor damper GFD-100
61-093	Motor damper GFD-125
61-094	Motor damper GFD-160
61-095	Motor damper GFD-200
61-096	Motor damper GFD-250

Quick action: on/off or modulating

61-046	Power supply 230V / 24V for GFD Motor Damper