

Vertiv™ Knürr® Fan Units

Features

CoolBlast®

- Modular construction for varying heat loads; different designs available.
- Top-mounting fan and 19-fan unit available.
- Special protection grid keeps pressure losses to a minimum and reduces noise levels.
- Energy-efficient speed-controlled design also available.

Silent top-mounting fan

- Minimal noise level for use in office environment.
- Provides forced rack cooling.

Filter fan

- Protection class IP54.
- Filter can be replaced quickly and easily.
- Can be used to draw or push air.

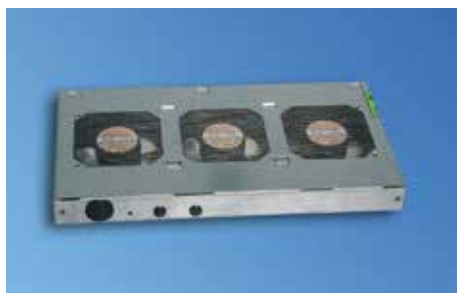
The ever-increasing power losses of electronic modules make for high demands on effective cooling. Large air-flow volumes ensure secured heat dissipation. The packing density of the electronic equipment in racks and enclosures is also increasing.

The sharp rise in the price of electricity has resulted in energy efficiency gaining importance and environmental concerns increasingly become a prominent decision-making factor. Consequently, the use of speed-controlled fan units is rising. The additional costs generally prove to be a worthwhile investment.



Vertiv™ Knürr® CoolBlast® Fan Unit for Cover Panel Installation Unregulated and thermostat-controlled

- Provides powerful rack cooling.
 - Suitable for retrofitting in cover panel of MIR2 / DCM rack.
 - DC versions and 115 VAC versions upon request (see Vertiv Knürr CoolBlast® fan inserts).
 - Thermostat-controlled model: Fan function (ON/OFF) thermostat-controlled; setting range from 0° to + 60° C.
- **Scope of delivery**
 - 1 x CoolBlast fan unit.
 - 1 x mains cable, 3 m with safety plug (230 VAC).
 - 1 x Mounting kit.
 - 1 x Operating instructions.
 - **How supplied**
 - Assembled, wired and tested.
 - **Note**
 - Please also order corresponding mains cable.
- **Material**
 - Enclosure: sheet steel, high-grade steel grid.
 - **Finish**
 - Zinc-passivated.
 - **Compliance**
 - CE marking compliant with Low Voltage Directive 73/23/EEC; EMC directive 89/366/EEC



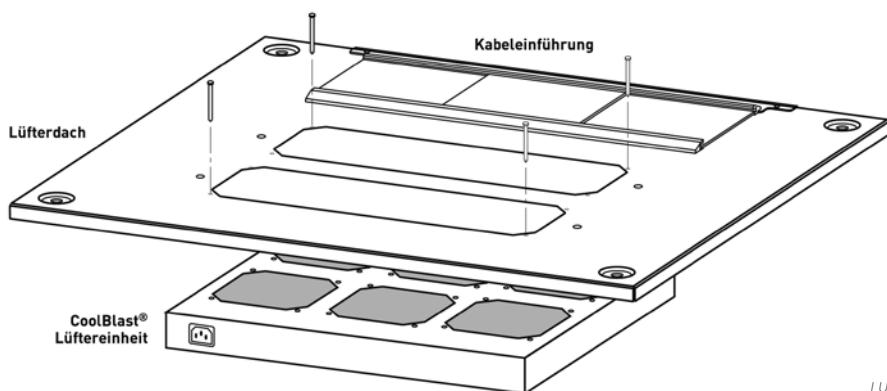
LUF20203



LUF20205



LUF20124



LUF20175

Name	Model	Electrical connection	P(W)	V (m³/h)	ΔP(Pa)	p(dB(A))	Order No.	UP
CoolBlastT 230V 3-piece		207..253 VAC; 50/60 Hz	45	495	74	45.2	03.027.301.1	1 unit
CoolBlastT 230V 6-piece		207..253 VAC; 50/60 Hz	90	990	74	48.8	03.027.302.1	1 unit
CoolBlastT 230V 2-piece	Thermostat	207..253 VAC; 50/60 Hz	30	330	74	43.4	03.027.310.1	1 unit
CoolBlastT 230V 3-piece	Thermostat	207..253 VAC; 50/60 Hz	45	495	74	45.2	03.027.311.1	1 unit
CoolBlastT 230V 6-piece	Thermostat	207..253 VAC; 50/60 Hz	90	990	74	48.8	03.027.312.1	1 unit

- assemble to order (shipped within 5 working days).
Caution: In case of larger orders, delivery times may increase.



LUF20160



LUF20161



LUF20124

Vertiv™ Knürr® CoolBlast® Fan Unit for Cover Panel Installation speed-controlled

- Provides powerful rack cooling.
- Suitable for retrofitting in top cover of MIR2 / DCM rack.
- DC version upon request (see CoolBlast fan inserts).
- Settable reference temperature (20° to 55° C).
- Speed control, 30 to 100 %, if sensor fails, 100 % rotation.
- Individual fan monitoring.
- Potential-free common alarm output for excess temperature and fan failure.
- Visual status display for O.K., excess temperature and fan failure.
- Acoustic warning inclusive reset button.

Material

- Enclosure: sheet steel, high-grade steel grid.

Finish

- Zinc-passivated front cover plate, powder-coated, smooth in RAL 7035 light-grey.

Compliance

- CE marking compliant with Low Voltage Directive 73/23/EEC; EMC directive 89/366/EEC.

Scope of delivery

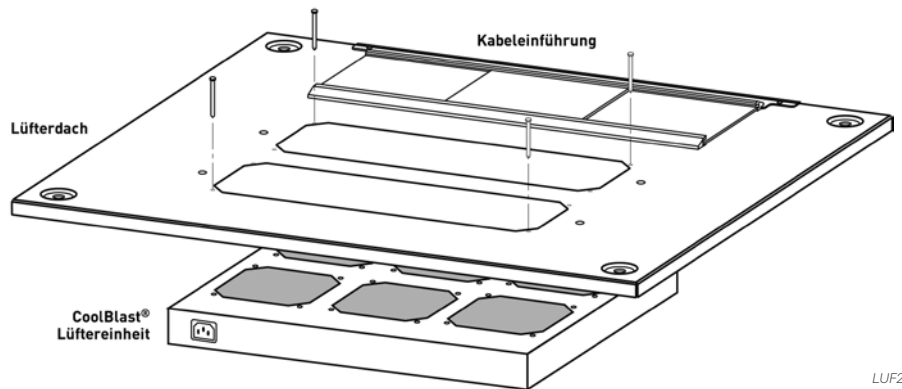
- 1 x CoolBlast fan unit.
- 1 x sensor cable, 2 m (plug-in).
- 1 x signal cable, 2 m (plug-in).
- 1 x mains cable, 3 m with safety plug (230 VAC).
- 1 x Mounting kit.
- 1 x Operating instructions.

How supplied



- Assembled, wired and tested.


Note

- Please also order specific mains cable.



LUF20175

Name	Model	Electrical connection	P(W)	V (m³/h)	ΔP(Pa)	p(dB(A))	Order No.	UP
CoolBlastT 230V 3-piece	Regulated SP	100..253 VAC; 50/60 Hz	25	553	68	49.6	03.027.321.1	1 unit
CoolBlastT 230V 6-piece	Regulated SP	100..253 VAC; 50/60 Hz	48	1106	68	53.3	03.027.322.1	1 unit
CoolBlastT 230V 3-piece	Regulated HP	100..253 VAC; 50/60 Hz	32	711	173	55.8	03.027.324.1	1 unit 
CoolBlastT 230V 6-piece	Regulated HP	100..253 VAC; 50/60 Hz	62	1422	173	59.1	03.027.325.1	1 unit 

 = assemble to order (shipped within 5 working days).
Caution: In case of larger orders, delivery times may increase.

Dimensions in mm:

W = Width h = Installation height U = Standard rack unit kg = Weight
H = Height d = Usable depth (1 U = 44.45 mm)
D = Depth L = Length UP = Packaging unit

Conversion:

1 mm = 0.03937 inch
1 kg = 2.2046 pounds

SP = Standard Performance V = Air-flow volume (m³/h)
HP = High Performance ΔV = Air-flow volume loss (%)
UP = Ultra High Performance ΔP = Pressure increase (Pa)
n = Number of fans I nom = Nominal current (A)
W = Power consumption I max = Residual current (A)
V = Voltage p = Sound pressure (dB(A))
(400V = 3-phase) distance from the rack 1 m (600 mm x 600 mm; raised cover)



LUF20125



LUF20139

19" Vertiv™ Knürr® CoolBlast® Fan Unit Unregulated and thermostat-controlled

- Fan unit for vertical ventilation of modules in 19" racks.
- Chassis rails are recommended for mounting. Chassis rails are required with 6-piece CoolBlast (use chassis runner, adjustable depth).
- Thermostat-controlled model:
Fan function (ON/OFF) thermostat-controlled; setting range from 0° to + 60° C.

Material

- Sheet steel, high-grade steel grid.

Finish / Color

- Enclosure zinc-passivated.
- Front cover plate, powder-coated, smooth in RAL 7035 light-grey.

How supplied

- Assembled, wired and tested.

Compliance

- CE marking compliant with Low Voltage Directive 73/23/EEC; EMC directive 89/366/EEC.

Scope of delivery

- 1 x CoolBlast fan unit, packed with operating instructions.
- 1 x connection cable, 2 m; Euro power plugs and sockets.

Note

- Please also order specific mains cable.

Name	W	H	D	kg	n	Electrical connection	P(W)	V' (m³/h)	ΔP(Pa)	p(dB(A))	Order No.
CoolBlast 230V 3-piece, thermostat	440	43,6	230	3	3	207 ... 253VAC; 50/60Hz	45	495	74	45,2	03.027.011.1
CoolBlast 230V 6-piece, thermostat	440	43,6	390	6	6	207 ... 253VAC; 50/60Hz	90	990	74	48,8	03.027.012.1
CoolBlast 115V 3-piece, thermostat	440	43,6	230	3	3	103,5 ... 126,5VAC; 50/60Hz	44	576	88	47,3	03.027.014.1
CoolBlast 115V 6-piece, thermostat	440	43,6	390	6	6	103,5 ... 126,5VAC; 50/60Hz	88	1152	88	50,8	03.027.015.1
CoolBlast 24V 3-piece SP	440	43,6	230	2,5	3	12...27 VDC	23	553	68	49,6	03.027.031.1
CoolBlast 24V 6-piece SP	440	43,6	390	5	6	12...27 VDC	46	1106	68	53,3	03.027.032.1

Technical data for Axial Single Fan

	Vertiv Knürr CoolBlast®	Vertiv Knürr CoolBlast	Vertiv Knürr CoolBlast	Vertiv Knürr CoolBlast	Vertiv Knürr CoolBlast
Item number	01914.0709	01914.0759	01914.0509	01914.0519	01914.0519-2
Dim: L x W x H	119 x 119 x 38	119 x 119 x 38	119 x 119 x 38	119 x 119 x 38	119 x 119 x 38
Max. volume flow, free blowing:	184.2 m³/h	237 m³/h	192 m³/h	165 m³/h	120 m³/h
Voltage	24 VDC	24 VDC	115 VAC	230 VAC	230 VAC
Frequency			50 Hz	50 Hz	50 Hz
Power consumption	74 W	11 W	14,5 W	15 W	7,5 W
Noise, free blowing	43 dB(A)	59 dB(A)	41 dB(A)	38 dB(A)	32 dB(A)
Bearing system	Ball bearing	Ball bearing	Ball bearing	Ball bearing	Ball bearing
Nominal speed	2950 min-1	4400 min-1	2900 min-1	2600 min-1	2100 min-1
Permitted ambient temp.	-10 °C to + 70 °C	-30 °C to + 55 °C	-40 °C to + 60 °C	-40 °C to + 60 °C	-40 °C to + 70 °C
Service life, L10 at 40°C	75,000 h	70,000 h	43,500 h	43,500 h	43,500 h
Compliance	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE
Use in fan unit:	03.027.021.1 03.027.022.1 03.027.051.1 03.027.052.1 03.027.321.1 03.027.322.1	03.027.024.1 P 03.027.025.1 03.027.054.1 03.027.055.1 03.027.324.1 P 03.027.325.1 P	03.027.014.1 03.027.015.1	03.027.011.1 03.027.012.1 03.027.301.1 03.027.302.1 03.027.310.1 03.027.311.1 P 03.027.312.1 02.111.180.9 05.010.306.1 01.24.3428.1 03.028.110.8	02.111.181.9 05.010.307.1



LUF20128



LUF20140



LUF20054

19" Vertiv™ Knürr® CoolBlast® Fan Unit Speed-controlled

- Fan unit for vertical ventilation of modules in 19" racks.
- Reference temperature can be set (20°C to 55°C).
- Speed control, 30 to 100%; if sensor fails, 100% rotation.
- Individual fan monitoring.
- Potential-free alarm output for excess temperature alarm and fan failure.
- Visual status display for O.K., excess temperature and fan failure.
- Acoustic alarm can be switched off with switch.
- Chassis rails are recommended for mounting. Chassis rails are required with 6-piece CoolBlast (use chassis runner, adjustable depth).

Material

- Sheet steel, high-grade steel grid.

Finish / Color

- Enclosure zinc-passivated.
- Front cover plate, powder-coated, smooth in RAL 7035 light-grey.

Compliance

- CE marking compliant with Low Voltage Directive 73/23/EEC; EMC directive 89/366/EEC.

Scope of delivery

- 1 x CoolBlast fan unit, packed with operating instructions.
- 1 x sensor cable, 2 m (plug-in).
- 1 x signal cable, 2 m (plug-in).

Only with DC devices:

- 1 x connection cable, 2 m with connector plug and free ends.

Only with AC devices:

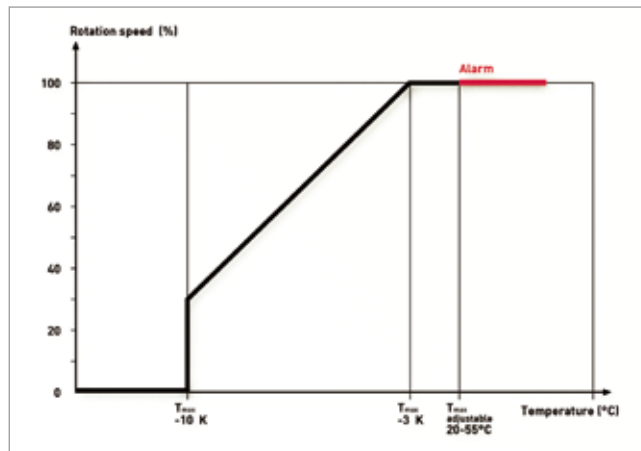
- 1 x connection cable, 2 m; Euro power plugs and sockets.

How supplied

- Assembled, wired and tested.

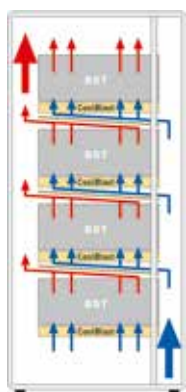
Note

Further project-specific characteristics can be realized in line with standards.



LUF20179

Name	W	H	D	kg	n	Electrical connection	P(W)	V' (m³/h)	ΔP(Pa)	p(dB(A))	Order No.
CoolBlast 115/230V, 3-piece, controlled SP	440	436	230	3.2	3	100 to 253VAC; 50/60Hz	25	553	68	496	03.027.021.1
CoolBlast 115/230V, 6-piece, controlled SP	440	436	390	6.2	6	100 to 253VAC; 50/60Hz	48	1106	68	533	03.027.022.1
CoolBlast 115/230V, 3-piece, controlled HP	440	436	230	3.2	3	100 to 253VAC; 50/60Hz	32	711	173	55.8	03.027.024.1
CoolBlast 115/230V, 6-piece, controlled HP	440	436	390	6.2	6	100 to 253VAC; 50/60Hz	62	1422	173	591	03.027.025.1
CoolBlast 24/48V, 3-piece, controlled SP	440	436	230	3.1	3	20 to 60VDC	25	553	68	496	03.027.051.1
CoolBlast 24/48V, 6-piece, controlled SP	440	436	390	6.1	6	20 to 60VDC	48	1106	68	533	03.027.052.1
CoolBlast 24/48V, 3-piece, controlled HP	440	436	230	3.1	3	20 to 60VDC	32	711	173	55.8	03.027.054.1
CoolBlast 24/48V, 6-piece, controlled HP	440	436	390	6.1	6	20 to 60VDC	62	1422	173	591	03.027.055.1



LUF20156

Vertiv™ Knürr® CoolBlast® – Air-flow Routing via Front Intake, 1 U

- The "front-intake unit" for the Vertiv™ Knürr® CoolBlast® fan delivers targeted cooling for module supports arranged on top of each other (heat sources).
- For Knürr CoolBlast slot-in unit 3- and 6 piece for front intake.
- Used as cooling baffle.
- Can be supplemented with front plate and filter mat.

Material

- Sheet steel.

Finish / Color

- Powder-coated texture, RAL 7035.
- Light-grey.

Scope of delivery

- 1 x air-flow guide.

How supplied

- Single items.

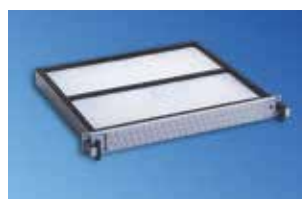


LUF20131



LUF20142

H	D	Model	Order No.	UP
436	230	For 3-piece	03.027.094.1	1 unit
436	390	For 6-piece	03.027.095.1	1 unit



LUF0205

19" Filter Unit, 1 U

- Suitable for use with CoolBlast slot-in unit.
- Adjusted to the respective recess depth.

Material

- Enclosure: sheet steel.
- Front cover plate: ABS (UL94 V-0).
- Handle: extruded aluminum.
- Filter: Viledon P 15/150.

Filter class

- G2.

Finish / Color

- Enclosure: powder-coated texture, RAL 9011 dark-grey.
- Front cover plate: RAL 7035, light-grey.
- Handle: powder-coated texture, RAL 5008 grey-blue.

Scope of delivery

- 1 x filter insert.
- 1 x filter.

How supplied

- Single items.

H	D	kg	Order No.	UP
436	282	2.0	03.025.250.1	1 unit
436	660	4.0	03.025.253.1	1 unit



LUF20136

Vertiv Knürr CoolBlast Front Plate

- For use with air-flow guide for front intake.
- Can be retrofitted.

Material

- Sheet steel.

Finish / Color

- Powder-coated, RAL 7035.
- Light-grey, smooth.

Scope of delivery

- 1 x front plate.

How supplied

- Single items.

H	Order No.	UP
436	03.027.097.1	1 unit

P = assemble to order (shipped within 5 working days).
Caution: In case of larger orders, delivery times may increase.

Dimensions in mm:				Conversion:	
W = Width	h = Installation height	U = Standard rack unit	kg = Weight	1 mm	= 0.03937 inch
H = Height	d = Usable depth	(1 U = 44.45 mm)		1 kg	= 2.2046 pounds
D = Depth	L = Length	UP = Packaging unit			
SP = Standard Performance	V = Air-flow volume (m ³ /h)				
HP = High Performance	ΔV = Air-flow volume loss (%)				
UP = Ultra High Performance	ΔP = Pressure increase (Pa)				
n = Number of fans	I _{nom} = Nominal current (A)				
W = Power consumption	I _{max} = Residual current (A)				
V = Voltage (400V = 3-phase)	p = Sound pressure (dB(A) distance from the rack 1 m (600 mm x 600 mm; raised cover)				



LUF20121

CoolBlast® Dust/Particle Protection Solution 1: Filter Mat

- Used with CoolBlast® fan top cover.
- Simple filter cover preventing the ingress of dust when the fan stops (regulated or thermostat-controlled version available).
- For all top-cover sizes; filter and adhesive tape can be cut to the required length.

- **Material**
 - Fyledon (filter class G2)
- **Scope of delivery**
 - 1 x filter.
 - 1 x Adhesive tape.
- **How supplied**
 - In sets.



LUF20168

Model	Order No.	UP
For 2, 3 and 6-piece fan unit	01.149.101.9	1 set



LUF20135

Vertiv Knürr CoolBlast Filter for Front Intake

- For use with air-flow routing via front intake.
- Can be retrofitted; filter can also be replaced during operation.

- **Filter class**
 - G2.
- **Material**
 - Viledon K15/150.
- **Scope of delivery**
 - 1 x filter.
- **How supplied**
 - Single items.

W	D	Model	Order No.	UP
400	160	For 3-piece	03.027.098.1	1 unit
400	320	For 6-piece	03.027.099.1	1 unit



LUF00280

Replacement Filter

- For 19" filter insert.
- **Material**
 - Filter: Viledon P 15/150.
- **Filter class**
 - G2.
- **Scope of delivery**
 - 1 x filter.
- **How supplied**
 - Single items.

D	Order No.	UP
282	03.025.246.9	1 unit
660	03.025.249.9	1 unit

Filter Fan

- For specific use where hot spots occur.
- Also suitable for retrofitting, quick and easy.
- The filter mats provide high-level filtration, are easily exchanged and can be cleaned.
- These maintenance-free fans feature a long service life and low noise levels.
- Air-flow routing: blows into the rack (pre-set).
- Can be used to draw in or move air out.

■ **Material**
- Heat-resistant ABS plastic, UL 94 V-0

■ **Color**
- RAL 7035 light-grey.

■ **Compliance**
- CE marking

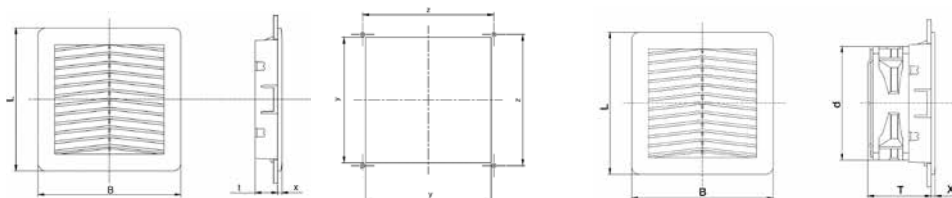
■ **Protection rating**
- IP 54.



LUF20057



LUF20058



LUF80011

LUF800040

LUF80012

LxW	D/l/x	y/z	kg	Max. AF	El. conn.	L	G	N	Service life/40°	Model	Order No.	UP
150 x 150	71/120/5	125/131	0.812	57 m3/h	230V / 50/60Hz	20 W	43 dB(A)	2650/min	40,000 h	Filter fan	03.026.501.1	1 unit
204 x 204	90/120/5.7	177/185	1	90 m3/h	230V / 50/60Hz	20 W	43 dB(A)	2650/min	40,000 h	Filter fan	03.026.502.1	1 unit
250 x 250	113/172/6	223/230	1.690	240m3/h	230V / 50/60Hz	29 W	50 dB(A)	2800/min	40,000 h	Filter fan	03.026.503.1	1 unit
325 x 325	125/208/7	291/302	3.620	520m3/h	230V / 50/60Hz	67 W	63 dB(A)	2770/min	50,000 h	Filter fan	03.026.504.1	1 unit
150 x 150	24/5	125/131	0.140							Exit filter	03.026.511.1	1 unit
204 x 204	20.5/5.7	177/185	0.275							Exit filter	03.026.512.1	1 unit
250 x 250	25/6	223/230	0.440							Exit filter	03.026.513.1	1 unit
325 x 325	26/7	291/302	0.780							Exit filter	03.026.514.1	1 unit
150 x 150										Replacement filter mat	03.026.521.9	6 unit
204 x 204										Replacement filter mat	03.026.522.9	6 unit
250 x 250										Replacement filter mat	03.026.523.9	6 unit
325 x 325										Replacement filter mat	03.026.524.9	6 unit

Dimensions in mm:

W = Width	h = Installation height	U = Standard rack unit	kg = Weight	1 mm = 0.03937 inch
H = Height	d = Usable depth	(1 U = 44.45 mm)		1 kg = 2.2046 pounds
D = Depth	L = Length	UP = Packaging unit		
SP = Standard Performance	V = Air-flow volume (m ³ /h)			
HP = High Performance	ΔV = Air-flow volume loss (%)			
UP = Ultra High Performance	ΔP = Pressure increase (Pa)			
n = Number of fans	I nom = Nominal current (A)			
W = Power consumption	I max = Residual current (A)			
V = Voltage (400V = 3-phase)	p = Sound pressure (dB(A) distance from the rack 1 m (800 mm x 600 mm; raised cover)			



LUF00237a

Temperature Module

- For monitoring the inside temperature of the rack.
- Temperature display (+ 10°C to + 70°C).
- Alarm temperature set via potentiometer at the front.
- Visual alarm display (LED red).
- Alarm signaling via potential-free switching contact (1 changeover contact 250 VAC / 8 A).
- Power supply 230 V / 50 Hz.

- **Material**
 - Plastic.

- **Compliance**
 - CE marking compliant with Low Voltage Directive 73/23/EEC; EMC directive 89/336/EEC.

- **Scope of delivery**
 - 1 x Temperature module.
 - 1 x Temperature sensor (3 m).

- **How supplied**
 - Assembled, wired and tested.

Order No.	UP
01.117.525.1	1 unit



LUF00256

19" Front Plate 1 U for Temperature Module

- For temperature module installation.

- **Material / Finish**
 - Sheet steel, 1.5 mm, powder-coated texture.

- **Color**
 - RAL 7035 light-grey.

- **Scope of delivery**
 - 1 x 19" front plate.

Order No.	UP
01.117.526.1	1 unit



LUF00255

Bracket for Temperature Module

- For non-standard temperature module installation, e.g., on the side of the 19" extrusion.

- **Material / Finish**
 - Aluminum, 2 mm, polished.

- **Scope of delivery**
 - 1 x bracket.
 - 1 x Mounting kit.

- **How supplied**
 - In sets.

Order No.	UP
01.117.527.0	1 unit



LUF20000

Thermostat

- For monitoring the inside temperature of the rack with respect to slot-in units and heating fans.
- Setting range: + 10°C to + 60°C.
- Switching temperature difference (hysteresis) 2 K.
- Contact type: 1 changeover contact.
- Sensor: thermo-bimetal.
- Contact rating: 230 VAC/10 A (heating), 5 A (cooling).
- Interference suppression: compliant with DIN 55014.

- **Material**
 - Plastic.

- **Protection rating**
 - IP 30.

- **Compliance**
 - CE marking compliant with Low Voltage Directive 73/23/EEC; EMC directive 89/336/EEC.

- **Dimensions**
 - 74 x 74 x 23 mm.

- **Scope of delivery**
 - 1 x thermostat.
 - 1 x mounting bracket.
 - 1 x Mounting kit.

Order No.	UP
01.113.384.3	1 unit

Dimensions in mm:				Conversion:	
W = Width	h = Installation height	U = Standard rack unit	kg = Weight	1 mm	= 0.03937 inch
H = Height	d = Usable depth	(1 U = 44.45 mm)		1 kg	= 2.2046 pounds
D = Depth	L = Length	UP = Packaging unit			
SP = Standard Performance	V = Air-flow volume (m³/h)				
HP = High Performance	ΔV = Air-flow volume loss (%)				
UP = Ultra High Performance	ΔP = Pressure increase (Pa)				
n = Number of fans	I _{nom} = Nominal current (A)				
W = Power consumption	I _{max} = Residual current (A)				
V = Voltage (400V = 3-phase)	p = Sound pressure (dB(A) distance from the rack 1 m (600 mm x 600 mm; raised cover)				