



Schroff

ACCESSORIES

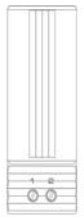
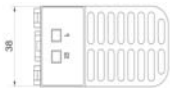
Climate control – Accessories

Heaters from 10 W to 150 W



10 / 20 W

Dimension drawing



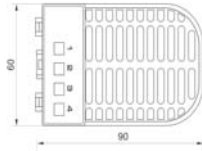
10 / 20 W



01116002

50 / 100 / 150 W

01116001



01116054

50 / 100 / 150 W

01116053

- Compact heater without fan
- Simple and fast assembly with clip-on attachment
- Broad range voltage input AC/DC 120 ... 240 V
- Low surface temperature, protective insulation, and temperature limitation with PTC resistance



Delivery includes (completely assembled)

Item	Qty	Description
1	1	Heater element, voltage AC/DC 100 ... 240 V; PTC resistor, self-regulating
2	1	Heating body housing, plastic UL94 V-0; type of fixing: Clip for 35 mm DIN rail EN 60715
3	1	Connection: 2-pin (10 W, 20 W) and/or 4-pin (50 W, 100 W, 150 W) terminal, 2.5 mm ² , torque 0.8 Nm max.

Order Information

Description	Part no.
10 W	60715-220
20 W	60715-221
50 W	60715-222
100 W	60715-223
150 W	60715-224

Note

- Thermostat for heating see page 4.65
- Hygrostat see page 4.68

Technical data

	10 W	20 W	50 W	100 W	150 W
Heater output in W	10	20	50	100	150
Max. switch-on current in A	1.0	2.5	2.5	4.5	8.0
Pre-fuse, delay-action in A	2.0	4.0	4.0	8.0	10.0
Type of protection	IP 20	IP 20	IP 20	IP 20	IP 20
Class of protection	II	II	II	II	II
Dimensions H × W × D in mm	98 × 38 × 75	98 × 38 × 75	110 × 60 × 90	110 × 60 × 90	150 × 60 × 90
Weight in kg	0.2	0.3	0.3	0.3	0.5
Connection	2-pin terminal, 2.5 mm ² , torque 0.8 Nm		4-pin terminal, 2.5 mm ² , torque 0.8 Nm		
Surface temperature in °C	< + 80°C, with exception of above mesh surface				
Test seal	CE, UL, VDE, EAC, RoHS				
Mounting	Clip-on attachment for 35 mm DIN rail (EN 60715)				

Climate control – Accessories

Heaters with heater fans from 150 W to 400 W



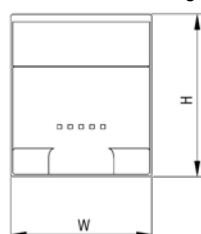
- Compact heater with fan, small, compact design with high heater output
- Simple and fast assembly with clip-on attachment or bolt fixing
- Dynamic heating up and temperature limitation by PTC technology
- Quiet



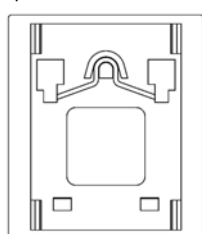
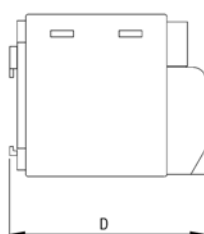
Delivery includes (completely assembled)

Item	Qty	Description
1	1	Heater element, voltage 230 V _{AC} , resistor (PTC resistance) self-regulating
2	1	Heating body housing, plastic UL94 V-0; type of fixing: Clip for 35 mm DIN rail EN 60715
3	1	Axial fan, airflow from bottom to top
4	1	Connection: 2-pin terminal, 2.5 mm ² , torque 0.8 Nm max.

Dimension drawing



Clip attachment



Order Information

Description	Part no.
150 W	60715-225
250 W	60715-226
400 W	60715-227

Note

- Thermostat for heating see page 4.65
- Hygrostat see page 4.68

Technical data

	150 W	250 W	400 W
Heater output in W	150	250	400
Max. switch-on current in A	9.0	12	15
Pre-fuse, delay-action in A	10	10	16
Axial fan, free blowing output	13.8 m ² /h	45 m ² /h	45 m ² /h
Type of protection	IP 20	IP 20	IP 20
Class of protection	II	II	II
Dimensions H × W × D in mm	75 × 65 × 90	90 × 85 × 111	90 × 85 × 111
Weight in kg	0.3	0.5	0.5
Surface temperature in °C	< + 50°C, with exception of above mesh surface		< + 65°C, with exception of above mesh surface
Connection	2-pin terminal, 2.5 mm ² , torque 0.8 Nm max.		
Test seal	CE, UL, VDE, EAC, RoHS		
Mounting	Clip-on attachment for 35 mm DIN rail (EN 60715)		

Climate control – Accessories

Heaters from 30 W to 150 W



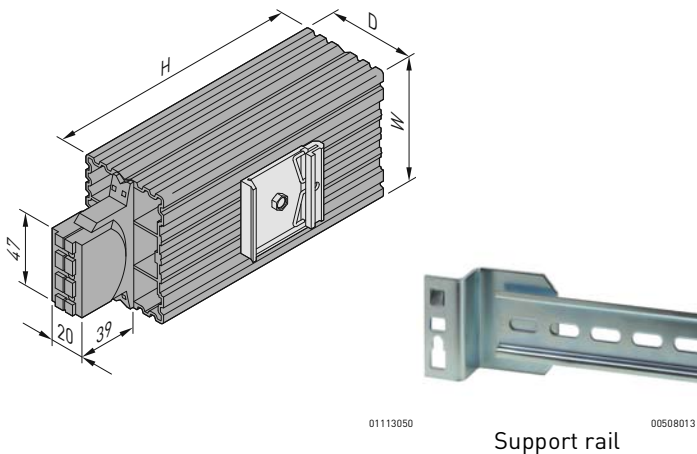
- Radiator heater (without fan)
- Simple and fast assembly with clip-on attachment and press-on terminal connection
- Wide input voltage range 110 ... 250 V_{AC}
- Temperature limiting with PTC resistor



Delivery comprises (completely assembled)

Item	Qty	Description
1	1	Heater element, voltage range 110 ... 250 V _{AC} ; resistor (PTC) self-regulating
2	1	Heating body, Al extrusion, anodised Fixing: clip for 35 mm DIN rail EN 50022
3	1	Connection: type 30, with connecting cable (3 x 0.5 mm ² , 300 mm long, black); type 45, 100, 150 with press-on terminal connection (for stranded/rigid wire 3 x 0.5 ... 2.5 mm ²)

01102004



01113050

Support rail

00508013

Order Information

Description	30 Part no.	45 Part no.	100 Part no.	150 Part no.
Heaters from 30 W to 150 W	60715-020	60715-021	60715-023	60715-030
Support rail DIN rail EN 50022 (35 mm), length 215 mm, 1 piece				20715-001

Technical data

	30 W	45 W	100 W	150 W
Heater output in W	30	45	100	150
Surface temperature in °C	approx. 100	approx. 105	approx. 130	approx. 140
Max. switch-on current in A	3,0	3,5	4,0	9,0
Type of protection	IP 54	IP 20	IP 20	IP 20
Class of protection	I	I	I	I
Dimensions H × W × D in mm	70 × 25 × 50	69 × 70 × 50	144 × 70 × 50	224 × 70 × 50
Weight in kg	0.2	0.3	0.5	0.7
Test seal	VDE, CE, UL (File E150057)	CE, UL (File E150057)	CE, UL (File E150057)	CE, UL (File E150057)
Assembly	Clip-on attachment for 35 mm DIN rail (EN 50022)			

Note

- Thermostat for heating see page 4.65
- Hygrostat see page 4.68

Climate control – Accessories

Heater fans 475/550 W



- Heater with fan and thermostat
- Simple and fast assembly with clip-on attachment
- 3-pin terminal clamp, separate heater/fan connection
- Thermostat from 0 ... 60 °C
- Temperature limiting with PTC resistor



Delivery comprises (completely assembled)

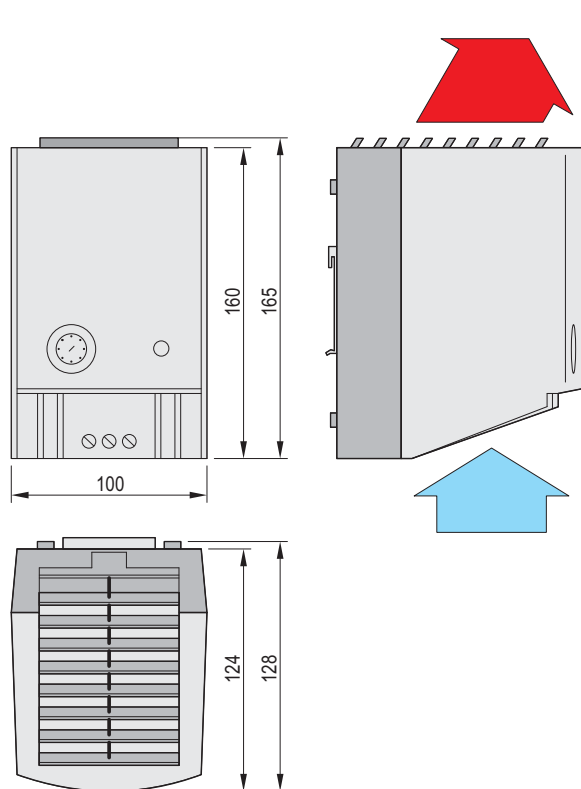
Item	Qty	Description
1	1	Plastic housing, polycarbonate (RAL 9002, grey white), clip for 35 mm DIN rail EN 50022
2	1	Heater element, 230 V _{AC} , resistor (PTC) self-regulating
3	1	Thermostat
4	1	230 V _{AC} fan

Order Information

Description	Part no.
Heater 475 W	60715-017
Heater 550 W	60715-018
Support rail DIN rail EN 50022 (35 mm), length 215 mm, 1 piece	20715-001

Technical data

Voltage range	230 V _{AC}			
	50 Hz	60 Hz	50 Hz	60 Hz
Frequency	50 Hz	60 Hz	50 Hz	60 Hz
Heater output	475 W	550 W	550 W	650 W
Air capacity of axial fan	35 m ³ /h	39 m ³ /h	45 m ³ /h	50 m ³ /h
Current at switch-on approx.	11 A		13 A	
Weight	0.9 kg		1.1 kg	
Heater element	Resistor (PTC), self-regulating			
Connection	3-pin connecting terminal, 2.5 mm ² , separate connection heating/fan			
Thermostat	Adjustment range 0 ... 60 °C			
Control lamp of control system	Glow lamp			
Temperature control	In the event of fan failure			
Type of protection	IP 20			
Class of protection	II			
Assembly	Clip-on attachment for 35 mm DIN rail (EN 50022)			
Dimensions	Height 165 mm, width 100 mm, depth 128 mm			



Support rail

Climate control – Accessories

Heater fan 400 W, modular



Example of a complete heater unit:
1: heater, 2: fan, 3: protective grille, 4: connection cable

01108007



Heater element

01108006



Support rail

00508013

- Modular system consisting of:
heater element, fan, protective grille and connecting cable
- Fan not included in delivery extent; please order fan with desired air capacity separately
- Simple and fast assembly with clip-on attachment
- Overheating protection through thermal switch



Delivery comprises (completely assembled)

Item	Qty	Description
1	1	Heater element, high-performance cartridge
2	1	Connecting cable fan - heating distributor, length 0.3 m
3	1	GND/earth cable, ring tag - open end, length 0.3 m
4	1	Clip-on attachment for DIN rail with assembly kit

Order Information

Description	115 V _{AC}	230 V _{AC}
	Part no.	Part no.
Heater fan 400 W, modular	60715-028	60715-029
Support rail DIN rail EN 50022 (35 mm), length 215 mm, 1 piece		20715-001

Technical data

Voltage range	115 V _{AC}	230 V _{AC}
Current at switch-on	3.5 A	1.8 A
Heater output	400 W	
Air capacity m ³ /h	Please choose desired fan	
Surface temperature with fan	Approx. 140 °C	
Type of protection	IP 20	
Class of protection	I, with GND/earthing	
Dimensions: height x width x depth in mm	22 x 120 x 160	
Assembly	Clip for 35 mm DIN rail EN 50022	

Note

- **Attention:** Danger of overheating, never use heater without fan
- Fan see page 4.63
- Thermostat for heating see page 4.65
- Hygrostat see page 4.68

Climate control – Accessories

AC fans for heating 400 W

- The fan is screwed below the heater and the cable is connected to the heater (please order connecting cable and protective grille separately)

Delivery comprises

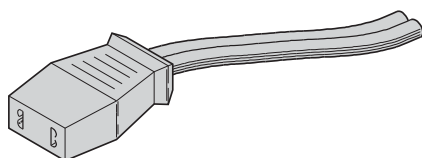
Item	Qty	Description
1	1	Fan (width 119 mm, depth 119 mm)

Order Information

	Height mm	Airflow volume m ³ /h	115 V _{AC} Part no.	230 V _{AC} Part no.
Type A	25	84	20713-146	20713-142
Type B	25	108	20713-147	20700-001
Type C	38	162	20713-244	20713-243
PVC (2 x 0.75 mm ²), 1 m long with 2 Faston connectors 2.8 x 0.5 mm to DIN 46343 T1, 1 piece				21101-246
Protective grille, metal, to screw-on				60197-019



Connecting cable

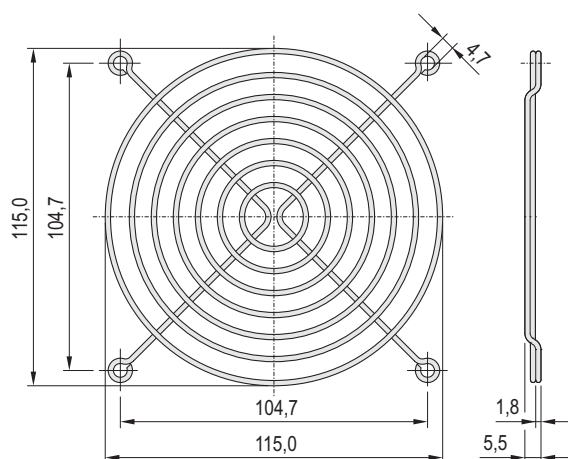


01108005

Dimensions AC fans

Type	Type A		Type B		Type C	
	50	60	50	60	50	60
Frequency in Hz	50	60	50	60	50	60
Airflow volume in m ³ /h	84	90	108	120	162	192
Noise level per fan in dB(A)	29	30	34	38	37	41
Max. static pressure in Pa	23	21	41	41	73	88
Max. ambient temperature in °C	70	70	70	70	70	70
Power consumption in W	8	7	14	11	15	14
Dimensions: height in mm (width 119 mm x depth 119 mm)	25		25		38	

KTA43091



Protective grille

01108055

Note

- Please order connection cable and protective grille separately

Climate control – Accessories

Speed control for fans with C13 plug

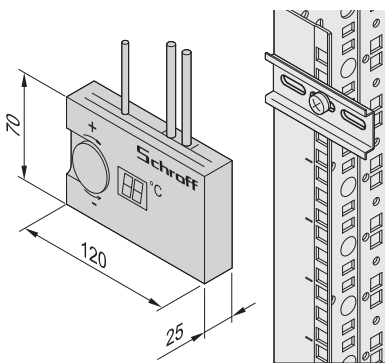


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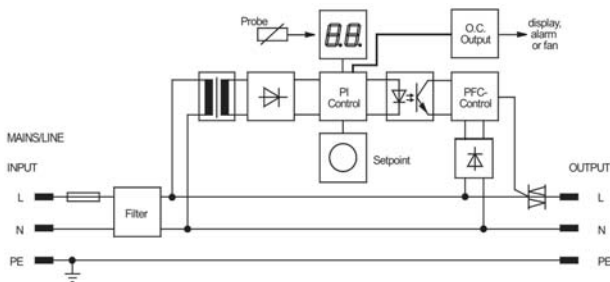
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Speed controller with connecting cables



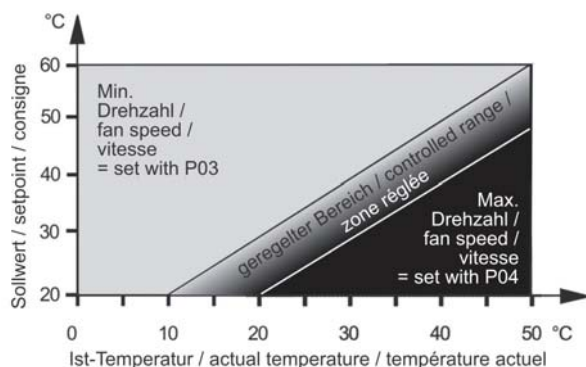
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Block diagram



01111050

Speed varies in relation to temperature



01111051

- Suitable for all AC fans and fan units (up to 300 W) with IEC 60320 C13 plug (plug & play)
- Simple to mount on the support rail provided
- Simple adjustment of switch-on temperature (with knob and digital display)
- External sensor can be fitted at a desired measurement point
- Open-collector output (parametrisable)
 - Alarm output (active/passive)
 - DC fans (PWM output)
 - Remote display (via optional digital display with front panel)

NEW

Delivery comprises

Item	Qty	Description
1	1	Speed controller; input/output voltages 115 ... 240 V _{AC} , see Technical Data
2	1	Temperature sensor, cable length 1.5 m
3	1	Fan cable, 2 m, with IEC 60320 socket
4	1	Mains cable, 3 m, with connecting plug
5	1	Support rail, St, zinc-plated (EN 50022)
6	1	Assembly kit

Order Information

Speed control for fans with C13 plug	Part no.
Mains cable SCHUKO/UTE plug	60715-005
Mains cable IEC 60320 C13 plug	60715-006
Accessories	
Thermostat with digital display 230 V _{AC} , 1 piece	Page 4.67
Thermostat with digital display 115 V _{AC} , 1 piece	Page 4.67
Connecting cable for DC fans or alarm output Length 2 m, 2-wire (0.34 mm ²), 1 piece	60715-007

Technical data

Voltage range	115 ... 240 V _{AC} (90 ... 264 V _{AC})
Frequency	48 ... 62 Hz
Power consumption	max. 4 VA
Display	LCD display, height 13 mm, red
Max. connection power	300 W (230 V _{AC}), 150 W (115 V _{AC})
Max. continuous current	1.3 A
Adjustment range	+20 ... +60 °C with potentiometer
Fan speed frequency	25 ... 100 %
Sensor	External NTC resistor
Sensor connection	AMP plug contact and cable, 1.5 m, 2 x 0.22 mm
In case of sensor failure	Max. speed
Fan connection	Cable 2 m with C13 IEC 60320 socket
Open-collector output	AMP plug contact, programmable function, V _{max.} 30 V _{DC} , I _{max.} 30 mA
Mains connection	Cable 3 m with plug
Mechanics	Case, IP 30, plastic, weight 0.5 kg, mounts on horizontal rail with lip DIN EN 50022
Dimensions	Width 120 mm, height 70 mm, depth 25 mm
Environmental conditions	0 ... 60°C, max. 85 % rel. humidity, non-condensing

Note

- Thermostat with digital display, see page 4.67

Climate control – Accessories

Thermostat with integrated temperature sensor

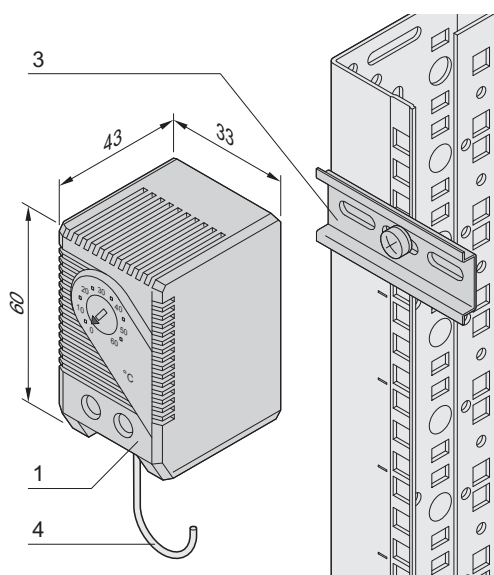


- To control fans or heaters
- Adjustment range 5 ... 60 °C
- Individual adaptation with three separate components: thermostat (for cooling or heating), assembly material, connecting cable (IEC connector or ferrules)
- 2 versions
 - for heating
 - for cooling



Delivery comprises

Item	Qty	Description
1	1	Thermostat, width 33 mm, height 60 mm, depth 43 mm; clip-on attachment for 35 mm DIN rail EN 50022, switched voltage 120 ... 250 V _{AC}
2	1	User manual



Order Information

Description	Part no.	Part no.
	for cooling	for heating
Thermostat with integrated temperature sensor	60715-136	60715-137

Accessories

Item	Description	Part no.
3	DIN rail (EN 50022) 35 mm; length 75 mm; with fixing materials kit, PU 1 set	21120-178
4	Connection cable, SCHUKO/UTE connector, cable length 1.5 m; connection on thermostat/hygrostat, 2-pin, ferrules; connection on fan IEC socket; 1 piece	62150-201
4	Connection cable, SCHUKO/UTE connector, cable length 1.5 m; connection on thermostat/hygrostat, 2-pin, ferrules; connection on fan/heater, 3-pin, ferrules, 1 piece	62150-264



Connection cable: 2-pin, ferrules - IEC socket



Connection cable: 2-pin, ferrules - 3-pin, ferrules

Dimensions

Thermostat	for cooling (make contact), blue control button	for heating (break contact), red control button
Adjustment range	0 ... 60 °C	
Switching temperature difference	7 K (± 4 K tolerance)	
Sensing element	Thermobimetal (snap-action contact)	
Contact resistance	<10 mΩ	
Lifespan	>100000 cycles	
Max. switch performance	10 A at 250 V _{AC} , 15 A at 120 V _{AC} ; 30 W at DC voltage	
Connection	2-pin clamp, up to 2.5 mm ² , torque max. 0.5 Nm	
Case	Plastic, in accordance with UL 94 V-0, light grey	
Dimensions	Height 60 mm, width 33 mm, depth 43 mm	
Assembly	Clip for 35 mm DIN rail, EN 50022	
Weight	40 g	
Operating/storage temperature	-20 ... +80 °C / -45 ... +80 °C	
Protection class	IP 20	

Climate control – Accessories

Thermostat with integrated temperature sensor



01102008

- To control heaters or fans
- Adjustment range 5 ... 60 °C

Delivery comprises

Item	Qty	Description
1	1	Thermostat with clip-on attachment for 35 mm DIN rail EN 50022, voltage 200 ... 250 V _{AC} and 100 ... 130 V _{AC}
2	1	Support rail, length 200 mm
3	1	Connection cable, length 1.5 m
4	1	Strain relief
5	1	Assembly kit for cabinet assembly

Order Information

Description	Part no.
Thermostat with integrated temperature sensor	20715-002

Technical data

Dimensions	Height: 75 mm, width: 75 mm, depth: 25 mm
Adjustment range	5 ... 60 °C
Switch difference	0,5 K
Supply voltage	200 ... 250 V _{AC}
Contact load	Heat (terminals 1 - 2) 10 A / 4 A
[ohmic load/inductive load]	Cool (terminals 1 - 3) 5 A / 2 A
Contacts	Changeover contact, single pole
Type of assembly	Bolt-on, snap mounting for slide rail

Thermostat with external temperature sensor



01102007

- To control heaters or fans
- External sensor can be positioned near the critical sub-assembly
- Adjustment range 20 ... 60 °C, switch difference 3 ... 10 K



Delivery comprises

Item	Qty	Description
1	1	Thermostat with external temperature sensor, sensor length approx. 1.7 m
2	1	Mounting plate for cabinet assembly, Al, 2.5 mm
3	1	Assembly kit

Order Information

Description	Part no.
Thermostat with external temperature sensor	20715-003

Technical data

Dimension (height x width x depth)	93 mm x 68 mm x 44 mm
Adjustment range	20 ... 60 °C
Switching difference	3 ... 10 K
Mains/line voltage	90 ... 260 V _{AC}
Contact load [ohmic load/inductive load]	24 A/10 A
Contacts	Change-over, single pin
Assembly	Screw-fixed

Climate control – Accessories

Thermostat with digital display



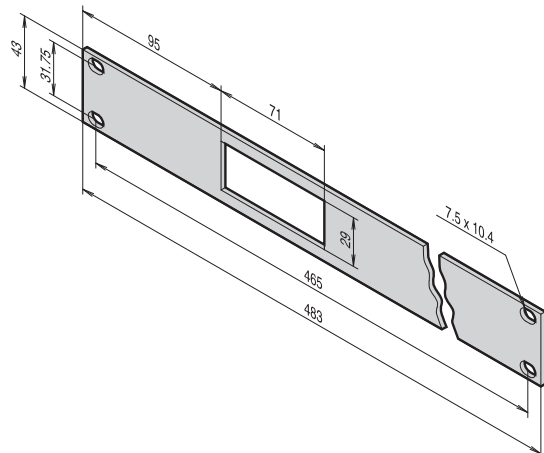
- Adjustment range from -50 to +100 °C (switch difference 0 ... 10 °C)
- Display switchable from °C to °F
- Programmable (secured against unauthorised operation)
- 3-character red segment display



Order Information

Description	Part no.
Thermostat with digital display, 230 V _{AC}	60715-132
Thermostat with digital display, 115 V _{AC}	60715-133
Front panel 1 U, RAL 7035 with cut-out for thermostat	30118-315
Front panel 1 U, anodised with cut-out for thermostat	30118-267
Front panel 1 U, RAL 7021 with cut-out for thermostat	30118-360

Front panel 1 U



01197001

SZA45550

Technical data

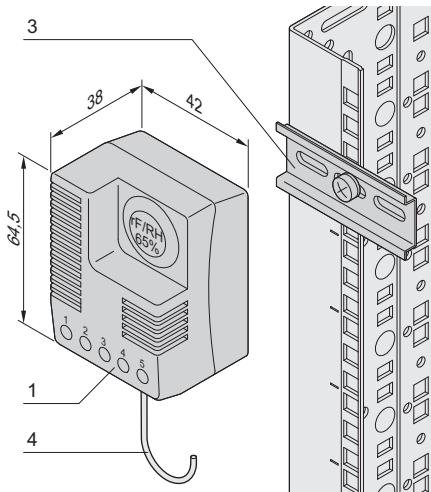
Operating voltage	115 V _{AC} or 230 V _{AC}
Power consumption	Approx. 3.5 W
Dimensions	Height: 35 mm, width: 76 mm, depth: 59 mm
Assembly cut-out	28.8 × 70.5 mm
Adjustment range	-50 ... +100 °C
Switch difference	0 ... 10 K selectable
Data safeguarding at power failure	Non-volatile memory
Contact load (ohmic load/inductive load)	8 A/3 A (ohmic/inductive load)
Input/sensor	PTC resistance, -55 ... +120 °C, cable length 3 m
Contacts	Relay, changeover contact, single pin
Protection class to front	IP 54
Connection	Screw-on terminals, 2.5 mm ²
Fixing	With clamping bracket
Type of assembly	Can be screwed on

Climate control – Accessories

Hygrostat



Hygrostat with adjustable and permanently set relative humidity ⁰¹¹¹⁶⁰⁰⁶



01108051



connecting cable, connection cable, 2-pole, ferrule - IEC-(female) connector; input jack; bush; socket ⁰¹¹⁰⁸⁰⁰⁹



connecting cable, connection cable, 2-pole, ferrules - ferrules ⁰¹¹⁰⁸⁰¹⁰

- Adjustable or fixed relative air humidity
- Switches fan or heaters when the set value is reached
- Visual display
- Integrated LED lights up when the connected consumer is switched on
- Individual adaptation with three separate components: Hygrostat, assembly material, connecting cable (input with SCHUKO/UTE connector; output with IEC connector or open end) please order separately



Delivery includes (assembled)

Item	Qty	Description
1	1	Hygrostat, width 42 mm, height 64.5 mm, depth 38 mm; clip-on attachment for 35 mm DIN rail EN 50022
2	1	User manual

Order Information

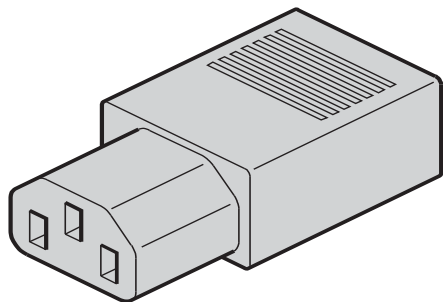
Description	Part no.
Hygrostat, fixed, 65 % air humidity	60715-138
Hygrostat, adjustable, 40 ... 90 % air humidity	60715-213
Accessories	
DIN rail [EN 50022] Item 3 35 mm; length 75 mm; with fixing materials kit, PU 1 set	21120-178
Connection cable Item 4 SCHUKO/UTE connector, cable length 1.5 m; connection on thermostat/hygrostat, 2-pin, ferrules; connection on fan IEC socket; 1 piece	62150-201
Connection cable Item 4 SCHUKO/UTE connector, cable length 1.5 m; connection on thermostat/hygrostat, 2-pin, ferrules; connection on fan/heater, 3-pin, ferrules, 1 piece	62150-264

Technical data

Supply voltage	230 V_{AC}, 50/60 Hz	
Default setting for relative air humidity	65 % fixed	40 ... 90% adjustable
Switch difference	5 % air humidity (w 1 % air humidity tolerance at 25 °C)	
Switch contact	Changeover contact (relay)	
Lifespan	> 50,000 cycles	
Max. switching capacity	8 A (16 A for 10 s)	
Mains supply	2-pin terminal, up to 2.5 mm ² , torque max. 0.5 Nm	
Output change-over relay	3-pin terminal, up to 2.5 mm ² , torque max. 0.5 Nm	
Case	Plastic, in accordance with UL 94 V-0, light gray	
Dimensions	Height 64.5 mm, width 42 mm, depth 38 mm	
Type of assembly	Clip for 35 mm DIN rail, EN 50022	
Weight	65 g	
Operating/storage temperature	0 ... +60 °C/-20 ... +70 °C	
Max. storage humidity	90 % air humidity (non-condensing)	
Type of protection	IP 20	

Climate control – Accessories

IEC input plug



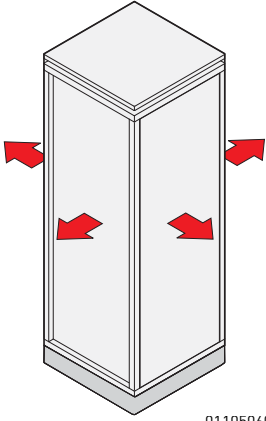
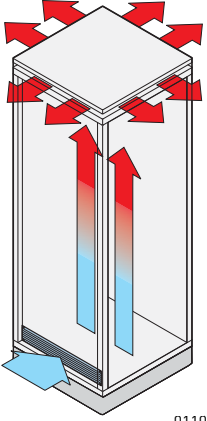
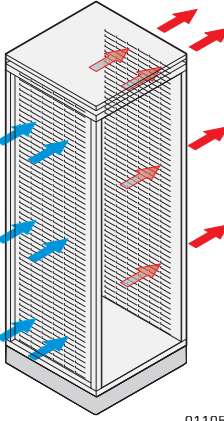
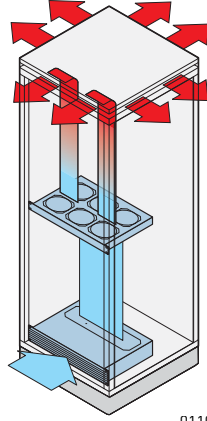
- For connection of fans
- Bolted housing made of heat-resistant plastic (UL 94 V-0)
- 10 A/250 V_{AC}, protection class I

Order Information

Description	Part no.
IEC input plug	60715-046

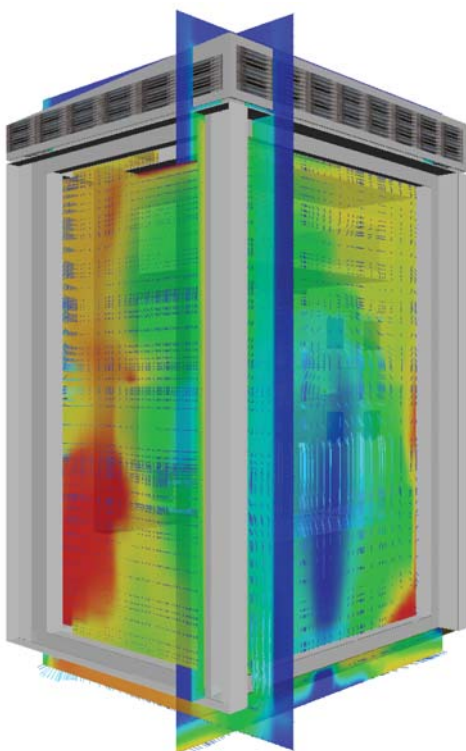
KTA45246

Products / cooling concepts

Product	Closed cabinet	Raised cover, ventilation slots	Perforated doors	19" circulation fan, top cover fan
Cooling principle				
Description	<small>01105060</small> Natural convection through thermal radiation	<small>01105058</small> Free convection through top opening	<small>01105056</small> Free convection through openings in doors/rear panels	<small>01105057</small> Cooling with air
Type of protection	≤ IP 55	≤ IP 20	≤ IP 20	≤ IP 20
Noise level approx.	0	0	55 ... 65 dB(A)	34 ... 67 dB(A)
Environmental conditions	$T_i > T_a$	$T_i > T_a$	$T_i > T_a$	$T_i > T_a$
Cooling capacity approx. ¹⁾	< 500 W	500 W ... 800 W	500 W ... 6000 W ²⁾	< 2000 W

¹⁾ depending on cabinet size, electronic components, location and room cooling concept
²⁾ > 800 W are only possible with own, active cooling through components like servers, etc.
 T_i = cabinet inner temperature T_a = cabinet ambient temperature

Thermal simulation



01103050

Project support through state-of-the-art simulation technology

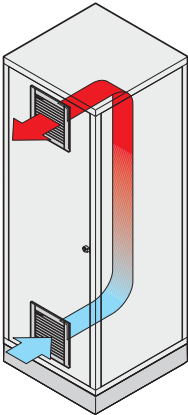
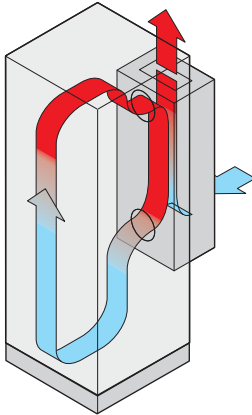
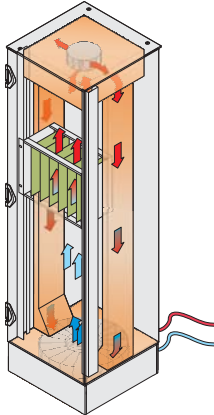
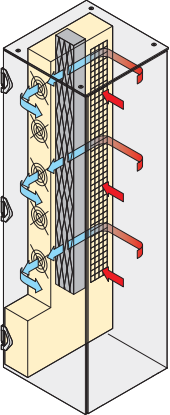
As the packing density and integration density of components increases, the transport of waste heat rapidly becomes more difficult. Analyzing heat transport through thermal paste, flow and heat radiation makes it possible to identify hot spots as early as the design phase. We use state-of-the-art numerical analyses and simulation methods to accomplish this. This allows the analysis and optimization of cooling concepts for anything from an assembly to an entire cabinet system at the preliminary stage. Our cooling specialists would be happy to assist you in finding the right cooling concept for your project

Your advantage:

- Analyzing in detail to eliminate thermal problems at the preliminary stage
- Ensuring the high efficiency and reliability of your systems
- Reducing the number of expensive prototypes and tests
- Reducing expenses and development costs

Climate control – Service

Products/cooling concepts

Product	Air filtered fans	Air conditioners	Air/water heat exchanger (LHX 3)	Air/water heat exchanger (LHX 20/40)
Cooling principle				
Description	01102050 Cooling with air	01105061 Cooling with coolant	01007055 Cooling with water	01005081 Cooling with water
Type of protection	≤ IP 55	≥ IP 55	≥ IP 55	≥ IP 55
Noise level	39 ... 71 dB(A)	60 ... 81 dB(A)	45.2 dB(A)	50 ... 70 dB(A)
Environmental conditions	$T_i > T_a$	$T_a \leq 55\text{ °C}$	$T_a \leq 70\text{ °C}$	$T_a \leq 70\text{ °C}$
Cooling capacity approx. ¹⁾	< 1500 W	< 17000 W	< 3000 W	< 40000 W

¹⁾ depending on cabinet size, electronic components, location and room cooling concept
 T_i = cabinet inner temperature T_a = cabinet ambient temperature

Optimal test equipment



Climate bay testing

Being part of the Pentair group, Schroff and McLean look back on 50 years of experience and are reknown around the world for their expertise in efficient cooling of industrial facilities and equipment.

Based on our own laboratory test chambers with the most modern equipment in Europe, America and Asia:

- Walk-in climate chamber to test and optimize completely integrated cabinets and systems under different conditions
- Smaller climate chambers to test components
- Airflow and air resistance measurements in a wind tunnel
- Noise level measurements
- Tests in accordance with DIN EN 60529 to determine the type of protection (IP)

Outstanding standard products, flexible custom solutions, global technical support and service add up to a 'cool' combination!

Appendix – Order notes

Packaging units

A packaging unit (PU) - e.g. carton, bag - contains the stated quantity. If you order the quantity 1, you will automatically receive the quantity defined as PU.

Example: EMC textile gasket
See page 5.22
Part number 21101-853

Quantity (per part number): 10 pieces

Order quantity: Delivery quantity:

1	10 pieces
2	20 pieces
3	30 pieces

Price list

Our price list is available by e-mail from your customer consultant. Please find all contact details at www.schroff.biz/contact.

Always up-to-date

Please visit our website www.schroff.biz where we continuously inform about news and technical changes.

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Front Panel Express: www.frontpanelexpress.eu

VARISTAR: www.varistar.co.uk

Railway technology: www.schroff.co.uk/railway

IT Infrastructure: www.schroff.co.uk/datacom

Standard pack quantity (SPQ)

Please take into consideration that deliveries may be carried out in the stated SPQs (SPQ, e.g. 5 pieces, 10 pieces, 50 pieces, etc.). Differing order quantities (e.g. 2 pieces) may be changed to the next possible delivery quantity = Standard Pack Quantity (in this case 10 pieces).

Example: Front horizontal rail
See page 5.31
Part number 34560-228

Quantity (per part number): 1 piece
Standard pack quantity (SPQ): 10 pieces

Order quantity: Delivery quantity:

≤ 10	10 pieces
> 10 ≤ 20	20 pieces
> 20 ≤ 30	30 pieces

Delivery times

Part numbers in bold face type are ready for despatch within 2 working days; part numbers in normal type are ready for despatch within 10 working days.

Business relations

Schroff is exclusively operating in Business to Business (B2B). Private individuals can buy Schroff products via our sales representatives (see www.schroff.biz/contact).

Responsible for contents and print

Schroff GmbH, Marketing Communication,
D-75334 Straubenhardt, Germany

The data in this catalogue have been thoroughly edited and checked - in assistance with an accredited Quality Management System in accordance with EN ISO 9001:2008.

Faults and spelling mistakes, but mainly changes due to improvements and further developments of our products are subject to change. There is no possibility to claim indemnity/compensation.

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