



6.1 Fan Module 84 HP

- The fan module is designed for vertical ventilation of a sub rack or desktop case.
- Modules for depths of 160 mm and 220 mm have 3 fans.
- These are arranged in an optimum configuration to ensure cooling of the printed PCBs over the entire width of the rack.
- Fan modules with 84 HP front panels (with on/off switch) are for mounting in withdrawable units and desktop cases acc. to DIN 41494, part 5, being run in and out on card guides.
- An AMP socket is used for the mains connection

6.1.1 Fan Module Vertical 84 HP

- 230V/50Hz (115 V on request)
- **Scope of delivery:**
 - 1 fan module 84 HP
- Front panel screws see below



6.1.1.1 Assembled, Ready for Connection

Height	Fan Type	Card Depth		Part-No.
		mm	inch	
1 U	69-430-20	160	6.29	27-110-02

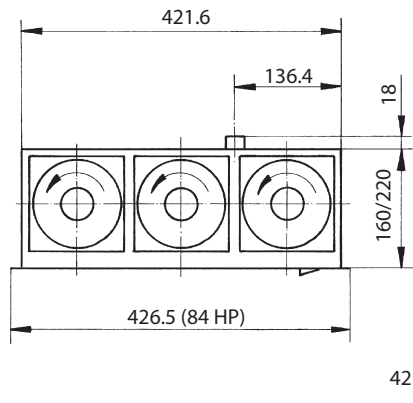
6.1.1.2 Front Panel Screws

- For mounting fan module in housing
- Set of 10 screws
- With screw retainer

Description	Part-No. 10 pcs.
Torx screws M2.5 x 11.3 , size T8, with plastic screw retainer	63K159
Rounded head screws recessed M2.5 x 11.3, with plastic screw retainer	63-159

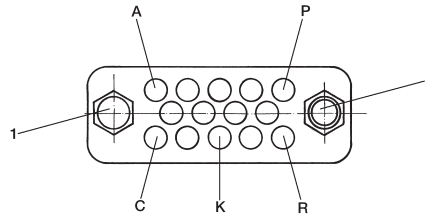
6: Ventilation

6.1.2 Line Drawing and Technical Information



Power Supply

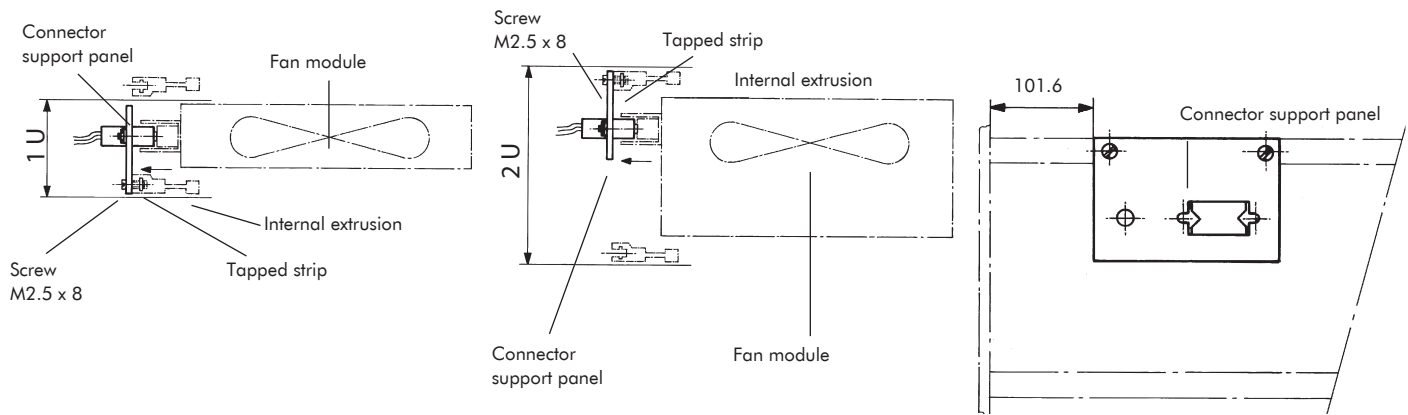
AMP connector, "M" series, 14 pole (pin)
Standard in fan modules 84 HP



- 1 coding socket
- 2 coding pin
- A-N -blue
- C-Na -blue
- K-PE -green / yellow
- P-L -brown
- R-La -brown

The fan module is inserted in the case or rack on card guides.

The AMP connector on the inserted fan module makes contact with the socket mounted on the rear extrusion.





6.2 Accessories for Ventilation

6.2.1 Fan



6.2.1.1 Fan 12V DC

- Brushless
- Sealed ball bearings
- Polarity and electronic locked rotor protection (autorestart)
- Air exhaust in over struts (can be mounted directly on a perforated front panel)
- Connector 2.8 x 0.5 (except fan with speed sensor)
- Fan case and wheel plastic UL94 V-0
- Operating temperature -20 °C to +70 °C
- CE, UL, CSA, VDE standard
- Life expectancy L10 = 70 000 hours at 40°C
- Special configuration with speed sensor

VDC	Voltage range VDC	Power consumption W**	Current consumption mA**	Rotational speed min ⁻¹	Noise dB (A)**	max. stat. pressure mm H ₂ O	Flow rate m ³ /h	Dimensions						Part-No.
								A		B		C		
								mm	inch	mm	inch	mm	inch	
12	6.0-13.8	6.80	570	2400	39	5.0	153	119.0	4.68	105.0	4.13	25.0	0.98	69-430-26
12	6.0-13.8	3.80	315	3200	41	4.8	93	92.0	3.62	82.5	3.24	25.0	0.98	69-430-32*

* with speed sensor

** with free exhaust

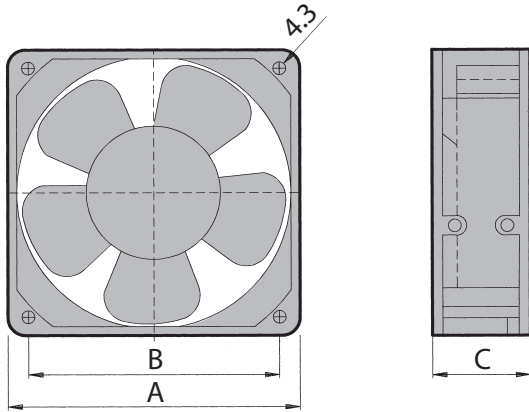
6: Ventilation

6.2.1.2 Fan 230V/115V AC

- Split-pole motor
- Sealed ball bearings
- Impedance protection resp. integrated thermal switch
- Connector 2.8 x 0.5
- Air exhaust in over struts (can be mounted directly on a perforated front panel)
- Fan case: aluminium
- Fan wheel: plastic UL94 V-0
- Operating temperature -40°C to $+70^{\circ}\text{C}$
- CE, UL, CSA, VDE standard
- Life expectancy L10 = 50 000 hours at 40°C

VAC	Freq. Hz	Power consumption W**	Current consumption mA**	Rotational speed min ⁻¹	Noise dB (A)**	max. stat. pressure mm H ₂ O	Flow rate m ³ /h	Dimensions						Part-No.
								A		B		C		
								mm	inch	mm	inch	mm	inch	
230	50/60	14.0/11.0	100/90	2300/2700	34/38	4.25/4.25	108/120	119.0	4.68	105.0	4.13	25.0	0.98	69-430-20
230	50/60	15.0/14.0	120/100	2600/2900	37/41	9.0/7.3	162/192	119.0	4.68	105.0	4.13	38.0	1.51	1925-79

** with free exhaust



6: Ventilation

6.2.4 Fan Speed Control

- Temperature regulator with acoustic alarm signal
- Simple conversion to external optical signal
- Range of regulation
 - Fan regulating range: min. speed up to 34 °C
max. speed at 48°C
 - Alarm regulating range: adjustable between 45°C and 54°C
- Voltage 12 V/DC, voltage range 10-14 VDC
- Temperature regulator current consumption 50 mA
- Max. current consumption 0,6 A
- Operating temperature 0°C to 65°C
- Storage temperature -20°C to +80°C

6.6.3 Fan Speed Control

Description	Part-No.
Fan speed control (incl. wiring)	7731-02

