CHAMPION

FM02 - FM06

Technical Information Sheet — Ver.02

Air Cooled 50Hz — 2025/10/07

Performance Data			FM 02	FM 02	FM 03	FM 04	FM 05	FM 05+AC	FM 06	FM 06 +AC
Working pressure		**bar**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
Minimum working pressure		bar g	5.0							
MAX Working pressure		bar g	10	10	10	10	10	10	10	10
Ambient temperature - min/max		℃	1-40							
Working Pressure	FAD* @ max. working pressure	m^3/min	**0,18**	**0,21**	**0,35**	**0,45**	**0,66**	**0,66**	**0,92**	**0,89**
	Total input power* @ max.working pressure	kW	**2,61**	**2,74**	**3,36**	**4,57**	**6,07**	**6,1**	**8,48**	**8,33**
5 bar	FAD*	m^3/min	**0,21**	**0,24**	**0,38**	**0,48**	**0,68**	**0,68**	**0,97**	**0,95**
	Total input power（P spec. - kW*min/m^3)	kW	1,80 (8,78)	1,94 (8,23)	2,43 (6,41)	3,38 (6,98)	4,64 (6,83)	4,71 (6,93)	6,79 (7,01)	6,76 (7,13)
6 bar	FAD*	m^3/min	**0,21**	**0,24**	**0,37**	**0,47**	**0,68**	**0,68**	**0,96**	**0,94**
	Total input power（P spec. - kW*min/m^3)	kW	1,92 (9,37)	2,08 (8,82)	2,59 (7,02)	3,53 (7,45)	4,95 (7,28)	4,97 (7,31)	7,11 (7,42)	7,08 (7,55)
7 bar	FAD*	m^3/min	**0,20**	**0,23**	**0,37**	**0,47**	**0,67**	**0,67**	**0,95**	**0,93**
	Total input power（P spec. - kW*min/m^3)	kW	2,20 (11,18)	2,25 (9,98)	2,78 (7,53)	3,78 (7,98)	5,22 (7,80)	5,25 (7,84)	7,43 (7,84)	7,41 (7,99)
8 bar	FAD*	m^3/min	**0,19**	**0,22**	**0,36**	**0,46**	**0,66**	**0,66**	**0,94**	**0,92**
	Total input power（P spec. - kW*min/m^3)	kW	2,26 (11,60)	2,38 (11,06)	3,02 (8,42)	4,06 (8,76)	5,48 (8,31)	5,50 (8,34)	7,82 (8,34)	7,78 (8,49)
9 bar	FAD*	m^3/min	**0,19**	**0,22**	**0,36**	**0,45**	**0,65**	**0,64**	**0,94**	**0,91**
	Total input power（P spec. - kW*min/m^3)	kW	2,49 (13,27)	2,59 (12,03)	3,19 (8,89)	4,25 (9,38)	5,76 (8,88)	5,76 (9,02)	8,23 (8,78)	8,13 (8,97)
10 bar	FAD*	m^3/min	**0,18**	**0,21**	**0,35**	**0,45**	**0,66**	**0,66**	**0,92**	**0,89**
	Total input power（P spec. - kW*min/m^3)	kW	2,61 (14,15)	2,74 (13,37)	3,36 (9,64)	4,57 (10,08)	6,07 (9,21)	6,10 (9,25)	8,48 (9,25)	8,33 (9,40)
Total input power at no load		kW	0,80	0,85	1,05	1,46	1,92		2,56	
Airend			GD1							
Male rotor speed		rpm	2057	2183	2914	3866	5476	5480	7720	7729
Discharge temperature of air above ambient		°C	45	45	45	38	33	8	38	14
Free field noise level **		dB(A)	63		64	67	68		70	
Electrical Data										
Nominal motor rating		kW	2,2	2,2	3,0	4,0	5,5	5,5	7,5	7,5
Nominal voltage [Tolerance] (Frequency)			230V	230V[±10%] (50Hz) 400V[±10%] (50Hz)						
Full load current max. @ 230V (1 phase)		Amp	12,7	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Full load current max. @ 400V (3 phase)		Amp	n/a	4,47	6,04	7,73	10,43		14,62	
Full load current max. @ 230V (3 phase)		Amp	n/a	7,74	10,46	13,39	18,06		25,32	
Starting current max. 230V (1 phase)		Amp	Approx. 3 times FLA	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Starting current max. 230V and 400V (3 phase) Y/D		Amp	n/a	n/a	n/a	Approx. 3 times full load current				
Starting current max. 230V and 400V (3 phase) DOL		Amp	n/a	Approx. 7 times full load current					n/a	n/a
Standard drive motor detail		IP	IP55, IE3							
Drive motor speed		rpm	2914				2935		2930	
Suggested cable size @ 230V (1 phase)		mm2	3G4	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Suggested cable size @ 400V (3 phase)		mm2	n/a	4G2,5	4G2,5	4G2,5	4G4		4G4	
Suggested cable size @ 230V (3 phase)		mm2	n/a	4G2,5	4G4	4G4	4G4		4G6	
Suggested fuse rating @ 230V (1 phase)		Amp	16	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Suggested fuse rating @ 400V (3 phase)		Amp	n/a	10	10	10	16		20	
Suggested fuse rating @ 230V (3 phase)		Amp	n/a	10	16	16	25		32	
Cooling Data										
Ventilating fan capacity		m^3/min	16			25				
Heat rejected by ventilating fan		%	max. 95% of terminal power							
Size of cooling air inlet aperture		mm	d. 300							
Size of cooling air outlet aperture		mm	260 x 262					255 x 289	260 x 262	255 x 289
Max. allowable pressure drop in duct at amb. 35°C/45°C		Pa	80/60			110/90				
Weights, Dimensions and Capacities										
Compressor oil capacity		litres	3,5							
Approx. oil carry over		PPM	≤3							
Compressed air delivery connection		BSPP	F 1/2"							
Weight		kg	151			154	168	173	174	179
Package dimensions L x W x H		mm	600 x 650 x 1100							

* Data measured and stated in accordance with ISO 1217 4th Edition Annex E and at the following conditions:
Air Intake Pressure: 1 bar a / 14.5 psia
Air Intake Temperature: 20°C / 68°F
Humidity: 0%(dry)

** Measured in free field conditions in accordance with ISO 2151, tolerance ± 3dB.

Our policy is one of continuous improvement and we therefore reserve the right to alter specifications without prior notice.