



## D22H RS

TIS D22HRS/11/13/CE

### Technical Information Sheet

V3

### 50 / 60 Hz, Regulated Speed, Water Cooled, CE Version

23.04.18

Performance Data		D22H RS						
Maximum working pressure	bar g	10,0						
Minimum working pressure	bar g	5,0						
Ambient temperature - min/max	°C	2 / 45						
		min. speed	speed 1	speed 2	speed 3	speed 4	max. speed	
5 bar	FAD* (Male rotor speed - rpm)	m <sup>3</sup> /min	<b>0,71</b> (850)	<b>1,25</b> (1348)	<b>1,80</b> (1848)	<b>2,35</b> (2348)	<b>2,90</b> (2848)	<b>3,45</b> (3350)
	Total input power* (P spec. - kW min/m <sup>3</sup> )	kW	6,00 (8,49)	8,65 (6,89)	11,53 (6,40)	14,64 (6,22)	17,99 (6,20)	21,56 (6,25)
6 bar	FAD*	m <sup>3</sup> /min	<b>0,70</b> (850)	<b>1,24</b> (1345)	<b>1,78</b> (1843)	<b>2,32</b> (2343)	<b>2,86</b> (2845)	<b>3,40</b> (3350)
	Total input power*	kW	6,82 (9,78)	9,53 (7,69)	12,53 (7,04)	15,83 (6,82)	19,46 (6,80)	23,39 (6,87)
7 bar	FAD*	m <sup>3</sup> /min	<b>0,69</b> (850)	<b>1,22</b> (1345)	<b>1,76</b> (1842)	<b>2,29</b> (2342)	<b>2,83</b> (2844)	<b>3,37</b> (3350)
	Total input power*	kW	7,64 (11,11)	10,44 (8,53)	13,58 (7,72)	17,07 (7,44)	20,95 (7,40)	25,20 (7,49)
7,5 bar	FAD*	m <sup>3</sup> /min	<b>0,68</b> (850)	<b>1,22</b> (1346)	<b>1,75</b> (1844)	<b>2,28</b> (2344)	<b>2,82</b> (2846)	<b>3,35</b> (3350)
	Total input power*	kW	8,06 (11,78)	10,91 (8,96)	14,14 (8,08)	17,73 (7,76)	21,72 (7,71)	26,09 (7,79)
8 bar	FAD*	m <sup>3</sup> /min	<b>0,68</b> (850)	<b>1,21</b> (1349)	<b>1,74</b> (1848)	<b>2,28</b> (2348)	<b>2,81</b> (2849)	<b>3,34</b> (3350)
	Total input power*	kW	8,48 (12,45)	11,41 (9,41)	14,73 (8,45)	18,41 (8,09)	22,51 (8,02)	26,98 (8,08)
9 bar	FAD*	m <sup>3</sup> /min	<b>0,73</b> (900)	<b>1,21</b> (1363)	<b>1,69</b> (1822)	<b>2,17</b> (2277)	<b>2,66</b> (2728)	<b>3,14</b> (3175)
	Total input power*	kW	9,62 (13,23)	12,52 (10,35)	15,71 (9,29)	19,20 (8,83)	22,98 (8,66)	27,07 (8,63)
10 bar	FAD*	m <sup>3</sup> /min	<b>0,77</b> (950)	<b>1,20</b> (1377)	<b>1,64</b> (1795)	<b>2,07</b> (2204)	<b>2,50</b> (2606)	<b>2,93</b> (3000)
	Total input power*	kW	10,81 (14,03)	13,65 (11,35)	16,71 (10,22)	19,96 (9,65)	23,41 (9,36)	27,05 (9,22)
Total input power at no load, fan switched off		kW						5,6
Male rotor speed		rpm						850 ... 3350
Approx. discharge temperature of air above inlet colling water (at max. power)		°C						12
Free field noise level ** at 70% load / at 100% load		dB(A)						64 / 65 (50 Hz) ; 66 / 67 (60 Hz)
Electrical Data								
Nominal motor rating		kW						22
Nominal voltage [tolerance] (Frequency)								380V[+10% -5%]; 400V[±10%]; 460V[±10%] (50, 60Hz)
Full load current max. at 380V / 400V / 460V		A						53 / 50 / 43
Starting current (max. % of full load current)		%						100
Standard drive motor detail								IP55 (IE-3) - IEC 60034-2-1 ECA Qualifying
Drive motor speed min./max.		rpm						850 ... 3350
Fan motor rating		kW						1 x 0,12 (50Hz) (IP-54) ; 1 x 0,15 (60Hz) (IP-54)
Suggested cable size at 380V / 400V / 460V (max.30°C / max. 50m / Copper)		mm <sup>2</sup>						4G16 / 4G16 / 4G10
Suggested fuse rating at 380V / 400V / 460V ( type gG )		A						63 / 63 / 50
Cooling Data								
Ventilating fan capacity		m <sup>3</sup> /min						25
Heat rejected by ventilating fan (max. % of actual input power)		%						12
Size of cooling air inlet aperture		mm						200 x 200
Size of cooling air outlet aperture		mm						888 x 340
Cooling water capacity max.		l/min						120
Cooling water requirement								35 l/min @ΔT = 10K @Δp = 0,4 bar
Cooling water inlet temperature min./max.		°C						5 / 35
Cooling water outlet temperature max.		°C						45
Cooling water pressure max.		bar g						10
Cooling water connection inlet / outlet (female screwed thread)								EN 10226-1 Rp 1 (DIN 2999-R 1)
Weights, Dimensions and Capacities Data								
Compressor water capacity		l						28
Approx. water consumption in 24 hours operation		l						10
Water supply pressure - min. / max.		bar g						2,2 / 6,0
Approx. water carry over		g/m <sup>3</sup>						0,2 ... 0,3
Compressed air delivery connection								EN 10226-1 R 1 (DIN 2999-R 1)
Water drain and supply connection								2 x G 3/8"
RO and regulation filter water drain connection								2 x G 1/4"
Weight		kg						658
Package dimensions L x W x H		mm						1309 x 848 x 1612

\* Data measured and stated in accordance with ISO1217 4rd Edition Annex C & 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 the ISO 2151, tolerance ± 3dB(A).

\*\*\* max. 30°C / max. 50m / Copper