



## D15H RS

TIS D15HRS/11/13/CE

### Technical Information Sheet

V3

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

23.04.18

Performance Data		D15H 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>0,37</b> (950)	<b>0,76</b> (1406)	<b>1,16</b> (1877)	<b>1,55</b> (2365)	<b>1,95</b> (2872)	<b>2,34</b> (3400)
	Total input power* (P spec. - kW min/m <sup>3</sup> )	kW	5,00 (13,57)	6,62 (8,67)	8,41 (7,27)	10,42 (6,72)	12,67 (6,51)	15,17 (6,48)
6 bar	FAD*	m <sup>3</sup> /min	<b>0,36</b> (950)	<b>0,75</b> (1420)	<b>1,13</b> (1900)	<b>1,52</b> (2389)	<b>1,91</b> (2889)	<b>2,30</b> (3400)
	Total input power*	kW	5,74 (16,00)	7,43 (9,95)	9,32 (8,22)	11,45 (7,52)	13,83 (7,24)	16,46 (7,16)
7 bar	FAD*	m <sup>3</sup> /min	<b>0,34</b> (950)	<b>0,73</b> (1430)	<b>1,11</b> (1915)	<b>1,49</b> (2405)	<b>1,87</b> (2900)	<b>2,25</b> (3400)
	Total input power*	kW	6,48 (18,88)	8,23 (11,35)	10,22 (9,23)	12,47 (8,37)	14,99 (8,01)	17,77 (7,88)
7,5 bar	FAD*	m <sup>3</sup> /min	<b>0,33</b> (950)	<b>0,71</b> (1431)	<b>1,09</b> (1917)	<b>1,47</b> (2407)	<b>1,85</b> (2901)	<b>2,23</b> (3400)
	Total input power*	kW	6,84 (20,66)	8,62 (12,13)	10,66 (9,77)	12,97 (8,82)	15,57 (8,41)	18,44 (8,27)
8 bar	FAD*	m <sup>3</sup> /min	<b>0,32</b> (950)	<b>0,69</b> (1429)	<b>1,07</b> (1913)	<b>1,45</b> (2403)	<b>1,83</b> (2899)	<b>2,21</b> (3400)
	Total input power*	kW	7,21 (22,84)	9,00 (12,98)	11,07 (10,33)	13,45 (9,28)	16,14 (8,83)	19,13 (8,67)
9 bar	FAD*	m <sup>3</sup> /min	<b>0,37</b> (1075)	<b>0,70</b> (1480)	<b>1,03</b> (1894)	<b>1,36</b> (2318)	<b>1,68</b> (2753)	<b>2,01</b> (3200)
	Total input power*	kW	8,40 (22,43)	10,00 (14,26)	11,87 (11,54)	14,02 (10,34)	16,46 (9,78)	19,25 (9,58)
10 bar	FAD*	m <sup>3</sup> /min	<b>0,43</b> (1200)	<b>0,71</b> (1532)	<b>0,99</b> (1877)	<b>1,27</b> (2235)	<b>1,55</b> (2609)	<b>1,83</b> (3000)
	Total input power*	kW	9,64 (22,17)	11,04 (15,49)	12,69 (12,80)	14,59 (11,49)	16,75 (10,82)	19,26 (10,55)
Total input power at no load, fan switched off		kW	3,9					
Male rotor speed		rpm	950 ... 3400					
Approx. discharge temperature of air above inlet cooling water (at max. power)		°C	11					
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	15					
Nominal voltage [tolerance] (Frequency)			380V[+10% -5%]; 400V[±10%]; 460V[±10%] (50, 60Hz)					
Full load current max. at 380V / 400V / 460V		A	38 / 36 / 31					
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	950 ... 3400					
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>	4G6 / 4G6 / 4G6					
Suggested fuse rating at 380V / 400V / 460V ( type gG )		A	40 / 40 / 40					
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			25 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	639					
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