



## L45 RS

TIS L-FR3-V5 45RS-A

### Technical Information Sheet

REV B

### Regulated Speed, Air Cooled

02.08.2023

Performance Data		L45 RS							
Maximum working pressure	bar g	13.0							
Minimum working pressure	bar g	5.0							
Ambient temperature - min/max	°C	1 to 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>1.51</b> (800)	<b>2.93</b> (1490)	<b>4.31</b> (2180)	<b>5.61</b> (2870)	<b>6.83</b> (3560)	<b>8.02</b> (4250)	
	Total input power* (P spec. - kW min/m <sup>3</sup> )	kW	10.03 (6.64)	16.38 (5.59)	23.20 (5.38)	30.95 (5.52)	39.64 (5.81)	48.88 (6.10)	
6 bar	FAD*	m <sup>3</sup> /min	<b>1.50</b> (800)	<b>2.92</b> (1490)	<b>4.30</b> (2180)	<b>5.60</b> (2870)	<b>6.81</b> (3560)	<b>7.98</b> (4250)	
	Total input power*	kW	10.92 (7.30)	17.73 (6.08)	25.01 (5.82)	33.22 (5.94)	42.37 (6.22)	52.08 (6.53)	
7 bar	FAD*	m <sup>3</sup> /min	<b>1.48</b> (800)	<b>2.90</b> (1490)	<b>4.28</b> (2180)	<b>5.58</b> (2870)	<b>6.79</b> (3560)	<b>7.95</b> (4250)	
	Total input power*	kW	11.83 (8.00)	19.07 (6.57)	26.80 (6.26)	35.45 (6.36)	45.04 (6.63)	55.19 (6.94)	
7.5 bar	FAD*	m <sup>3</sup> /min	<b>1.47</b> (800)	<b>2.89</b> (1490)	<b>4.27</b> (2180)	<b>5.57</b> (2870)	<b>6.78</b> (3560)	<b>7.93</b> (4250)	
	Total input power*	kW	12.28 (8.36)	19.75 (6.83)	27.68 (6.48)	36.55 (6.56)	46.34 (6.84)	56.68 (7.14)	
8 bar	FAD*	m <sup>3</sup> /min	<b>1.46</b> (800)	<b>2.84</b> (1470)	<b>4.18</b> (2140)	<b>5.45</b> (2810)	<b>6.62</b> (3480)	<b>7.75</b> (4155)	
	Total input power*	kW	12.74 (8.73)	20.19 (7.10)	28.07 (6.71)	36.79 (6.76)	46.41 (7.01)	56.65 (7.31)	
9 bar	FAD*	m <sup>3</sup> /min	<b>1.44</b> (800)	<b>2.74</b> (1430)	<b>4.01</b> (2060)	<b>5.20</b> (2690)	<b>6.31</b> (3320)	<b>7.38</b> (3960)	
	Total input power*	kW	13.68 (9.51)	21.06 (7.69)	28.78 (7.18)	37.17 (7.15)	46.37 (7.35)	56.27 (7.62)	
10 bar	FAD*	m <sup>3</sup> /min	<b>1.41</b> (800)	<b>2.64</b> (1390)	<b>3.82</b> (1980)	<b>4.95</b> (2570)	<b>5.99</b> (3160)	<b>7.01</b> (3770)	
	Total input power*	kW	14.66 (10.36)	21.90 (8.31)	29.40 (7.69)	37.44 (7.56)	46.16 (7.70)	55.72 (7.95)	
11 bar	FAD*	m <sup>3</sup> /min	<b>1.60</b> (900)	<b>2.73</b> (1450)	<b>3.84</b> (2000)	<b>4.88</b> (2550)	<b>5.85</b> (3100)	<b>6.79</b> (3630)	
	Total input power*	kW	16.94 (10.61)	24.01 (8.78)	31.32 (8.16)	39.08 (8.00)	47.39 (8.10)	55.83 (8.22)	
12 bar	FAD*	m <sup>3</sup> /min	<b>1.78</b> (1000)	<b>2.81</b> (1500)	<b>3.81</b> (2000)	<b>4.76</b> (2500)	<b>5.72</b> (3000)	<b>6.57</b> (3490)	
	Total input power*	kW	19.37 (10.89)	26.08 (9.28)	32.99 (8.65)	40.24 (8.46)	47.94 (8.38)	55.83 (8.50)	
13 bar	FAD*	m <sup>3</sup> /min	<b>1.96</b> (1100)	<b>2.89</b> (1550)	<b>3.82</b> (2000)	<b>4.75</b> (2450)	<b>5.64</b> (2900)	<b>6.32</b> (3350)	
	Total input power*	kW	21.92 (11.18)	28.21 (9.77)	34.66 (9.07)	41.37 (8.71)	47.93 (8.50)	56.03 (8.86)	
Total input power at no load, fan switched off		kW	2.8						
Male rotor speed		rpm	800 to 4250						
Approx. discharge temperature of air above ambient (at max. power)		°C	7						
Free field noise level ** at 70% load / at 100% load		dB(A)	70 / 73 (50Hz) ; 71 / 76 (60 Hz)						
Electrical Data									
Nominal motor rating		kW	45						
Nominal voltage [tolerance] (Frequency)			380V[+10% -5%]; 400V[±10%]; 460V[±10%] (50, 60Hz)						
Full load current max. at 380V / 400V / 460V		A	102 / 97 / 84						
Starting current (max. % of full load current)		%	100						
Standard drive motor detail			IP55 (IE3) - IEC 60034-2-1 ECA Qualifying						
Drive motor speed min./max.		rpm	800 to 4250						
Fan motor rating		kW	1,4 (50Hz) (IP-54) ; 1,5 (60Hz) (IP-54)						
Suggested cable size at 380V / 400V / 460V (max.30°C / max. 50m / Copper)		mm <sup>2</sup>	4G50 / 4G50 / 4G35						
Suggested fuse rating at 380V / 400V / 460V ( type gG )		A	125 / 125 / 100						
Cooling Data									
Ventilating fan capacity		m <sup>3</sup> /min	87						
Heat rejected by ventilating fan (max. % of actual input power)		%	95						
Size of cooling air inlet aperture		mm	731 x 639						
Size of cooling air outlet aperture		mm	764 x 740						
Approx. cooling air temperature above ambient (at max. power)		°C	29						
Max. allowable pressure drop in duct at ambient 35°C / 45°C		Pa	120 / 80						
Weights, Dimensions and Capacities Data									
Compressor oil capacity		l	23						
Oil carry over		mg/m <sup>3</sup>	< 3						
Compressed air delivery connection (male screwed thread)			EN 10226-1 R 1 1/2 (DIN 2999-R 1 1/2)						
Weight		kg	974						
Package dimensions L x W x H		mm	1722 x 920 x 1659						

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

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