



GDK45

50Hz

CCN: 47729460
Rev.: E
ECN: 1449702
Sheet: 1 of 1
Date: Oct-2021

Model		GDK45-7A	GDK45-8A	GDK45-10A
GENERAL PERFORMANCE DATA				
Rated discharge Pressure		7.0	8.0	10.0
Maximum Operating Pressure	(2)	7.2	8.2	10.2
Minimum Operating Pressure		4.5	4.5	4.5
Maximum Operating Ambient Temperature		40	40	40
Minimum Operating Ambient Temperature		°C	°C	°C
Maximum System Temperature Setting		109	109	109
Nominal Power - Main Motor		45	45	45
Main Motor Efficiency	(3)	%	94.2%	94.2%
Capacity FAD	(1)	m³/min	8.23	6.60
Package Input Power with Fan - Air Cooled	(4)	kW	55.1	51.5
Specific Power - Air Cooled	(4)(5)	kW/m³/min	6.7	7.8
SOUND LEVEL				
Noise Level Standard Package - Air Cooled	(6)	Sound Pressure - dB(A)	67	67
Noise Level Standard Package - Air Cooled		Sound Power - dB(A)	83	83
OIL CARRY OVER				
		mg/m³	3	3
COOLING DATA (@ Maximum Ambient Temperature & Maximum Discharge Pressure)				
Heat Removal (Oil Cooler)		kW	41.9	43.9
Heat Removal (Oil and Aftercooler)		kW	51.8	52.8
Permitted Additional Static Pressure		Pa	30	30
Fan Air Flow		m³/min	133	133
Fan Motor Nominal Power		kW	0.9	0.9
Cooling Air Temperature Rise @ 30°C		°C	20	21
Aftercooler CTD	(7)	°C	15.0	15.0
AIR END DATA				
Male Rotor Speed		RPM	4024	3852
Tip Speed Rotor		m/sec	28.87	27.64
Full Load Shaft Power		kW	51.1	50.7
COOLANT LUBRICATION DATA				
Total Coolant Capacity - Air Cooled	(12)	litres	25	25
PIPING CONNECTIONS				
Air Discharge	(8)	Inches G	1.50 INCH (FEMALE)	1.50 INCH (FEMALE)
Coolant Drain - Hose Size		Inches R	0.50 INCH (FEMALE)	0.50 INCH (FEMALE)
Diameter of Power Inlet		mm	39	39
DIMENSIONS AND WEIGHT				
Length*Width*Height		mm	1544*884*1405	1544*884*1405
Net Weight - Air Cooled		kg	870	870
GA Drawing Number - Air Cooled			47723358001	47723358001
ELECTRICAL DATA				
Motor Protection	(13)		TEFC, IP55	TEFC, IP55
Full Load Package Current - Air Cooled	(9)			
		Amps @ 400V	81	81
Main Motor Locked Rotor Current	(14)			
		Amps @ 400V	673	673
Package Power Factor			0.85	0.85
Electrical Installation				
Recommended Supply Cable Size	(10)			
		mm²/Cu (Kcmil) @ 400V	50	50
Maximum Recommended Fuse Rating	(10)(11)			
		Amps @ 400V	200	200

Notes:

- FAD (Free Air Delivery) is full package performance including all losses. Tested per ISO 1217 : 2009 Annex C
- Maximum pressure at package discharge, value at which compressor will unload when unit operating at maximum target pressure
- IE3 efficiency motor
- Measured at rated capacity and rated pressure
- Specific power guaranteed in accordance with ISO 1217 : 2009 Annex C
- Measured in free field conditions per ISO 2151 using Hemispherical Method: ducted inlet and outlet, with + 3 dB(A) tolerance
- CTD based on 38°C inlet air at 40% Relative Humidity (For alternate conditions contact Gardner Denver)
- G for domestic standard
- Maximum current includes 5% additional current due to fouled filters and elements
- 90°C copper cables. Always apply local electrical codes for sizing cables and system protection
- Time delay fuse recommended. Apply local electrical codes for fuse sizing
- Coolant volumes listed are approximate. See operator manual for coolant fill procedure
- 50Hz (±2%) motor voltage tolerance: (400V)±10%
- Star-Delta starting current inrush is about 33% of direct starting current
- During the Star-Delta open-starting transition, the in-rush current value could instantaneously peak from 1.8 to 2.8 times the noted Locked-Rotor-Amperage (LRA) values

Product Improvement is a continuing goal at Gardner Denver. Design and specifications are subject to change without notice or obligation.