NICOTRA Gebhardt

Specification of: DDMP 18/13 M6M3 DG7 400V-3F

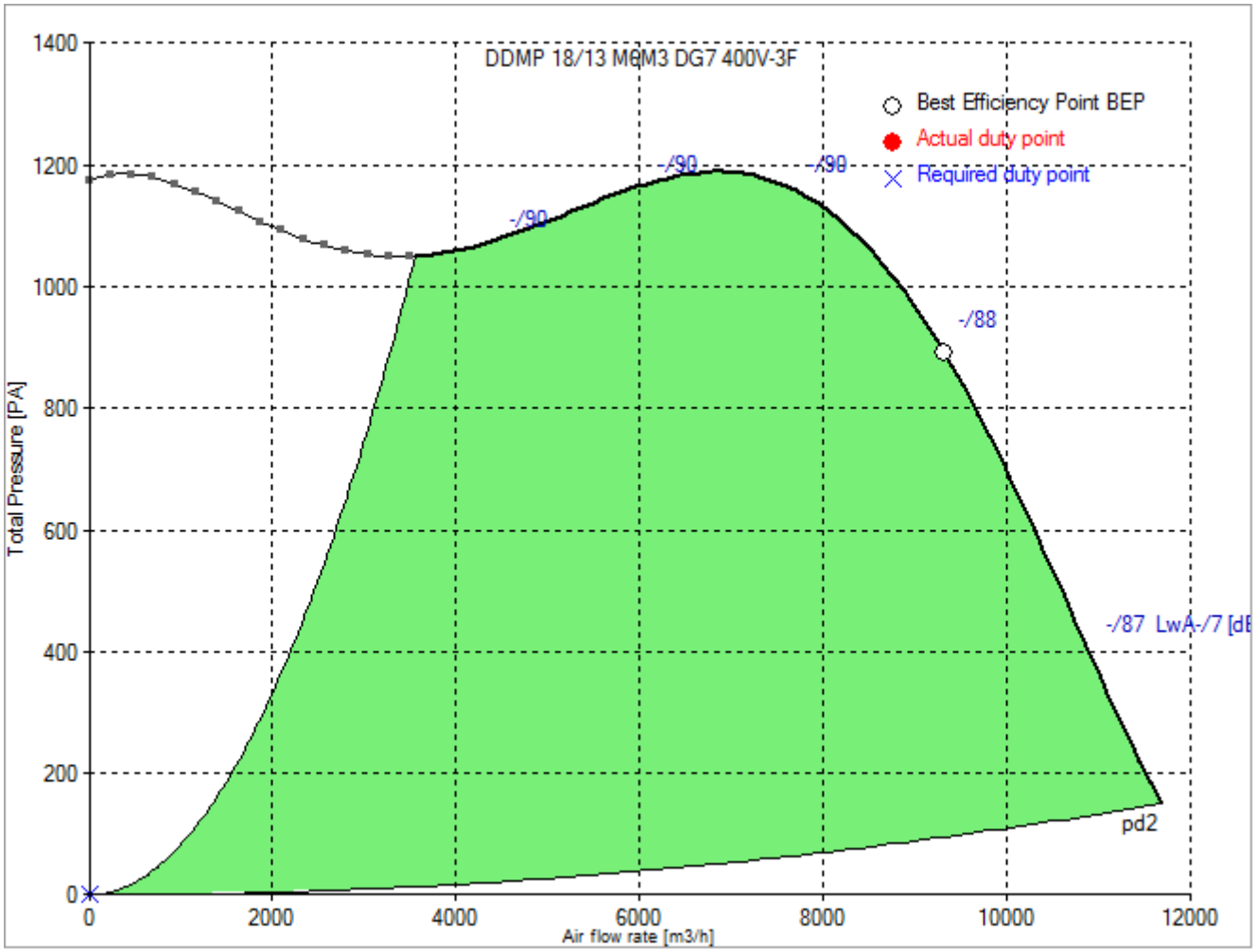
High performance centrifugal fan DDMP
Double width, double inlet (DWDI), direct drive, forward curved blades fan. Lap-jointed scroll made of galvanized steel (EN 10142), assembled through a high-technology roller-locked seaming. Straight cut off plate at fan discharge. Impeller with forward curved blades of galvanized steel plate, directly mounted on a brushless, permanent magnets, external rotor motor, without transmission losses, dynamically balanced according to DIN ISO 21940-11. Highly-efficient 5,5kW three-phase sensor-less driver, with advanced control algorithm, passive EMI filters and thermal derating protection. Driver directly installed on the scroll, and factory-configured, for a plug and play solution: no further configuration is needed. Continuous speed control of the Drive System by 0 ... 10 V analogue signal, or with Modbus RS485-compliant interface. All the drive system is completely in protection class IP 54. Power source 400V – 50/60 Hz. Air performance ratings according to AMCA 210-07 (Fig. 12) and ISO 5801:1997 (Fig. 69 c and par. 30.2 f).

Technical data of the fan: DDMP 18/13 M6M3 DG7 400V-3F

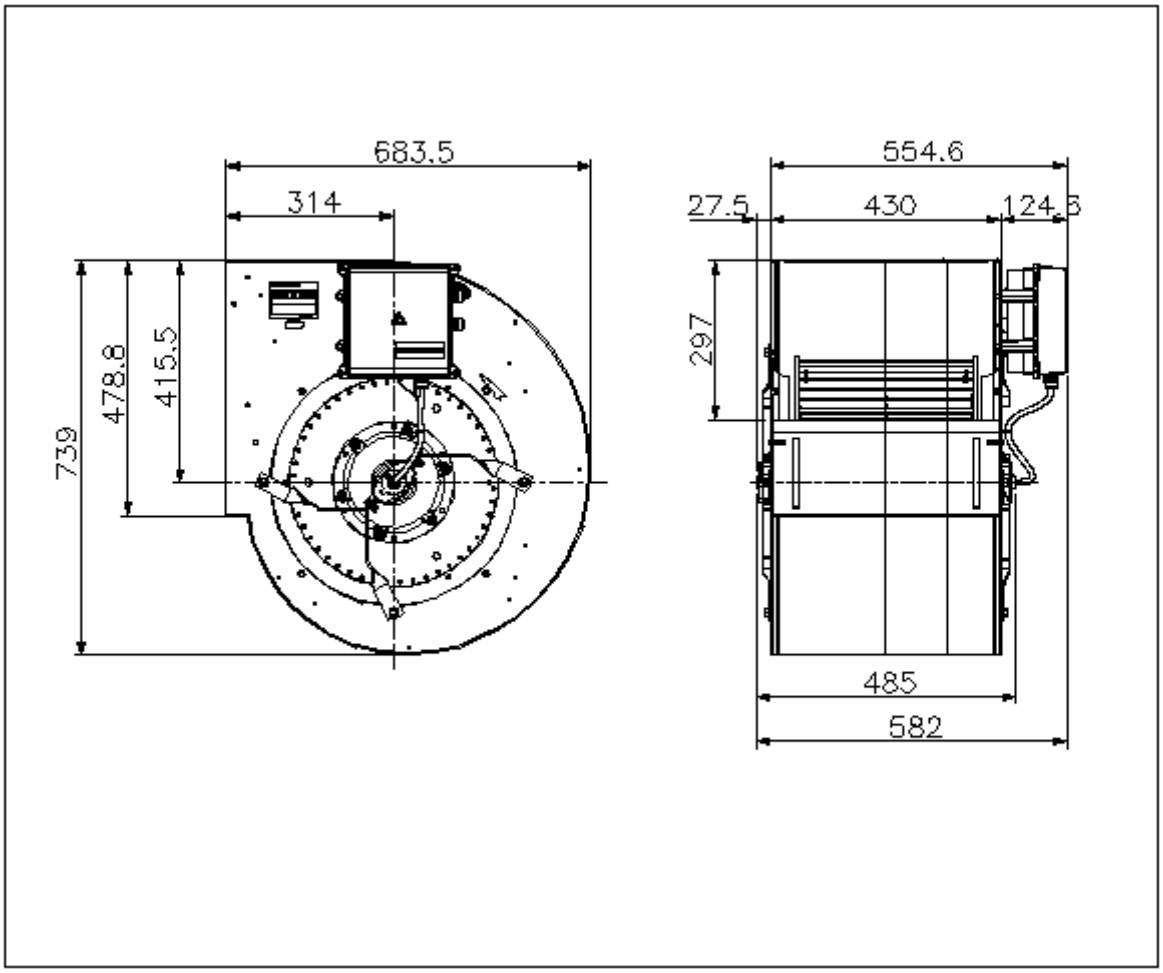
fulfills the ErP requirements 2015

Description	Value	Dimension
Specified duty point		
Actual duty point		
Installation acc. DIN 24163 Part 1	B	
Reference density (Rho1)	1.20	kg/m³
Medium temperature (t)	20	C
Fan weight	44	kg
This duty point can only be reached by using an inverter/controller for motor speed control!		
Rated data		
Phases-Voltage-Frequency	3~400-50/60	V-Hz
Rated motor speed (n_N)	1200	min^{-1}
Rated motor current (I_N)	6,9	A
operational limits		
Max. absorbed power (P_{1max})	4.45	kW
Temperature range of conveying medium (t_{min} ...t_{max})	-20...40	C
ErP-Data at best efficiency and density - kg/m^3		
measurement- / efficiency category	B / total	
design status of VSD	VSD is integrated	
overall efficiency (ETA_{opt})	65.9	%
achieved efficiency grade (N_{ist})	68.6	
required efficiency grade in 2013 / 2015 (N)	42 / 49	
Air flow rate (V_{opt})	9334	m³/h
pressure rise (dp_{opt})	899	Pa
Fan speed (n_{vopt})	978	min^{-1}
motor power input (P_{1opt})	3.54	kW
specific ratio (d_{dpopt})	1.009	

Fan curve to DDMP 18/13 M6M3 DG7 400V-3F

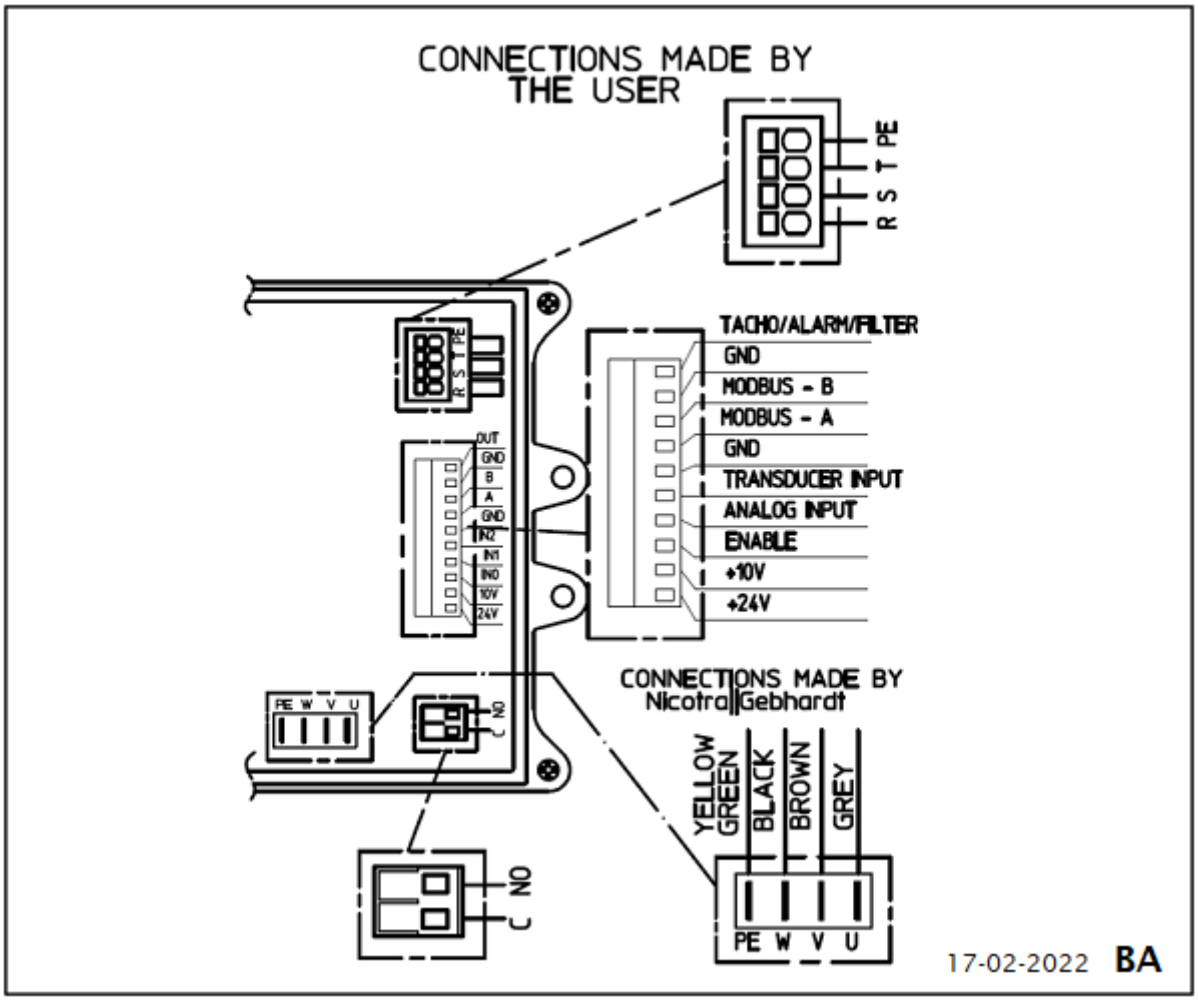


Dimensions to DDMP 18/13 M6M3 DG7 400V-3F



Rotation:	RD
Handing:	90

Wiring diagram of the fan DDMP 18/13 M6M3 DG7 400V-3F



Wiring diagram for connection to: mains - VSD - motor
Rotation: LG