

## Specification of: RDP E0-0280 1.9kW 230V-1F M6A8

### High performance centrifugal fan RDP

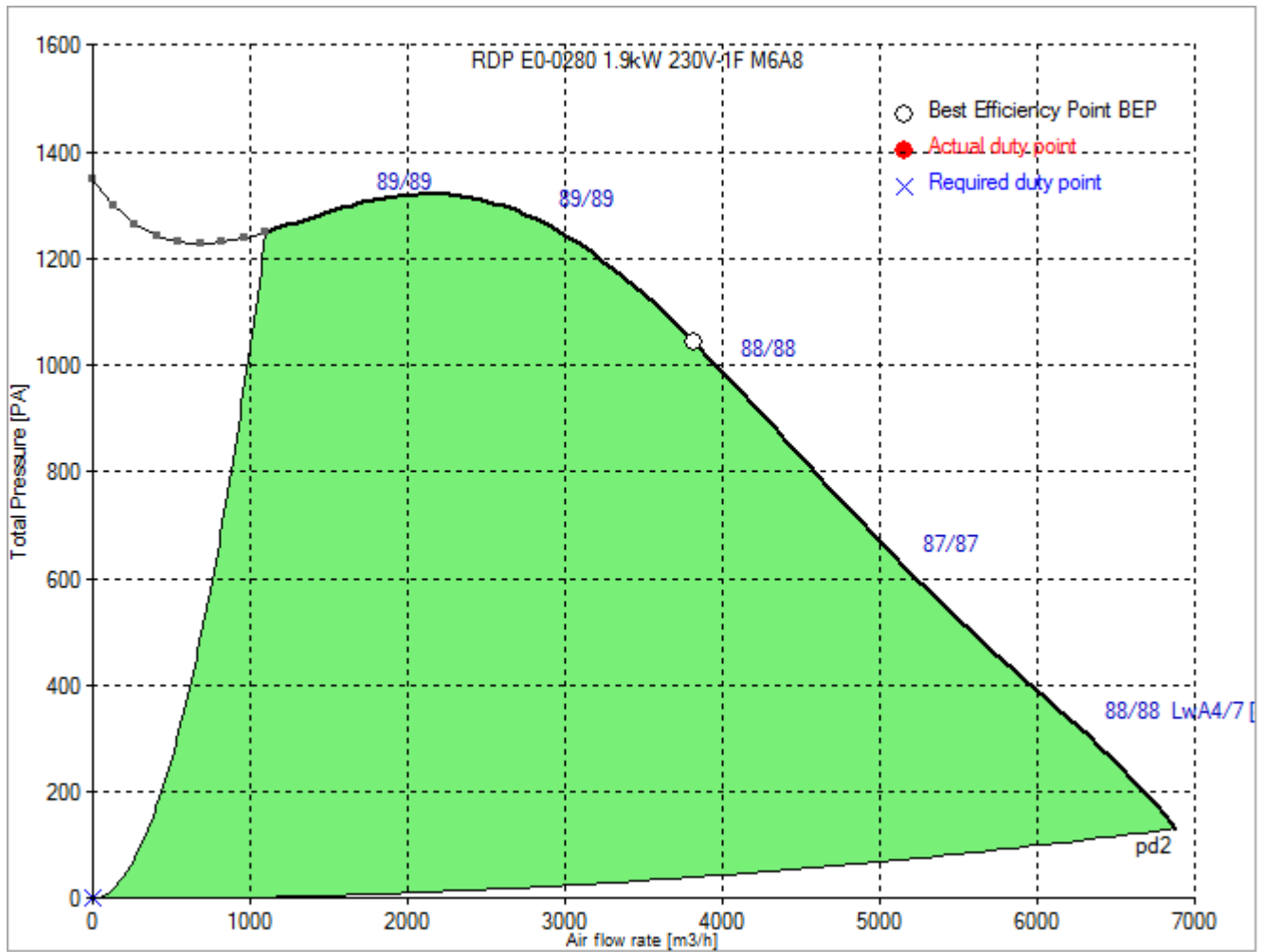
Double width, double inlet (DWDI), direct drive. Lap-jointed scroll made of galvanized steel (EN 10142), assembled through a standing cold-rolled seam. V-shaped cut-off at fan discharge. Centrifugal impeller with 11 backward inclined blades, welded, made of aluminium, directly mounted on a permanent magnet motor with external rotor, without transmission losses. Dynamically balanced according to DIN ISO 21940-11. High efficient 2 kW single-phase driver sensor-less algorithm with integrated active PFC 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 230V – 50/60 Hz. Maintenance free! Air performance ratings according to AMCA 210-07 (Fig. 12) and ISO 5801 (Fig. 69 c and par. 30.2 f).

### Technical data of the fan: RDP E0-0280 1.9kW 230V-1F M6A8

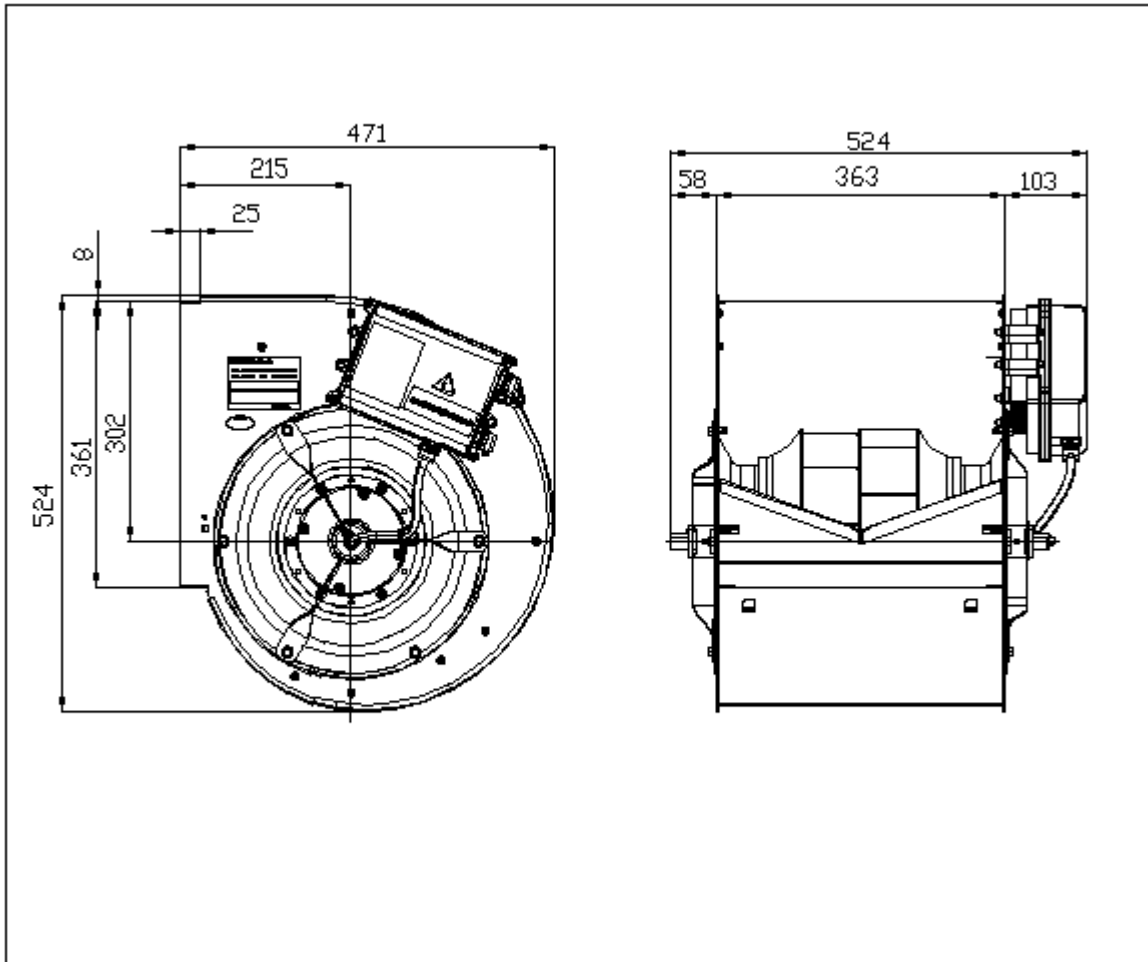
fulfills the ErP requirements 2015

Description	Value Dimension
<b>Specified duty point</b>	
<b>Actual duty point</b>	
Installation acc. DIN 24163 Part 1	B
Reference density (Rho1)	1.20 kg/m <sup>3</sup>
Medium temperature (t)	20 C
Fan weight	20 kg
<small>This duty point can only be reached by using an inverter/controller for motor speed control!</small>	
<b>Rated data</b>	
Phases-Voltage-Frequency	1~230-50/60 V-Hz
Rated motor speed (n <sub>N</sub> )	3180 min <sup>-1</sup>
Rated motor current (I <sub>N</sub> )	8,1 A
<b>operational limits</b>	
Max. absorbed power (P <sub>1max</sub> )	1.9 kW
Temperature range of conveying medium (t <sub>min</sub> ... t <sub>max</sub> )	-20...40 C
<b>ErP-Data at best efficiency and density - kg/m<sup>3</sup></b>	
measurement- / efficiency category	B / total
design status of VSD	VSD is integrated
overall efficiency (ETA <sub>opt</sub> )	63.4 %
achieved efficiency grade (N <sub>ist</sub> )	71.4
required efficiency grade in 2013 / 2015 (N)	61 / 64
Air flow rate (V <sub>opt</sub> )	3830 m <sup>3</sup> /h
pressure rise (dp <sub>opt</sub> )	1042 Pa
Fan speed (n <sub>vopt</sub> )	2982 min <sup>-1</sup>
motor power input (P <sub>1opt</sub> )	1.75 kW
specific ratio (d <sub>dpopt</sub> )	1.010

## Fan curve to RDP E0-0280 1.9kW 230V-1F M6A8



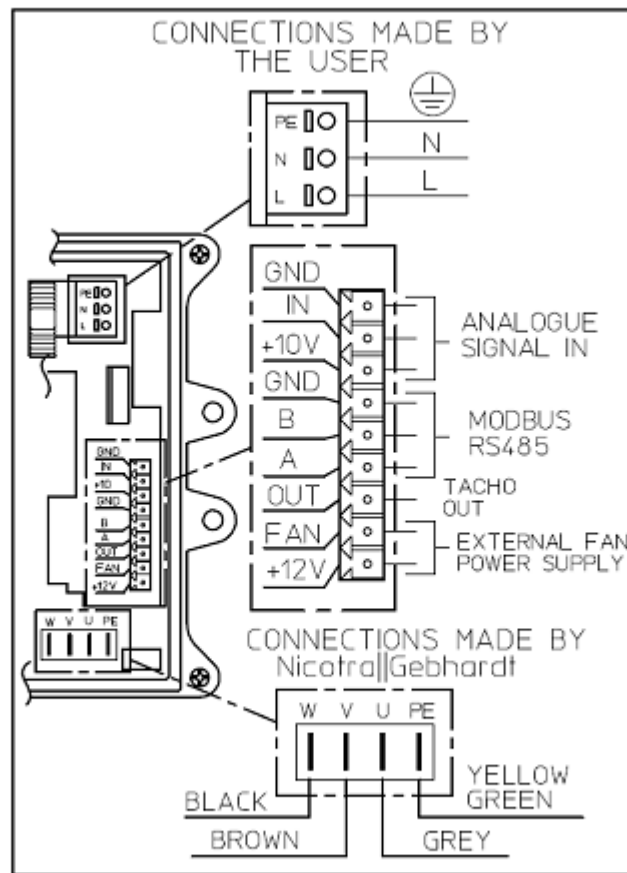
Dimensions to RDP E0-0280 1.9kW 230V-1F M6A8



Rotation:  
Handing:

RD  
90

## Wiring diagram of the fan RDP E0-0280 1.9kW 230V-1F M6A8



DDMP 2KW

28-11-2017 5X

Wiring diagram for connection to: [mains - VSD - motor](#)  
 Rotation: [LG](#)