VYBO Electric a.s.

Data Sheet	No.
Direct Current Electric Motor	Drawing No.

Customer	
Client reference	
Type	1GDC-280-31 80KW-315 KW
Brand	VYBO Electric

Identification

Type:		1GDC-280-31		Frame:	280				mm
Power:		80-315	kW	Poles:					P
Rated speed:	400V	450-1360	rpm	Rated Voltage:	400	-	440		V
	/	/		Connection:					
	440V	500-1500		Insulation Class:	H				
Speed with field weakened:		1000-2000	rpm	Duty:	S1				
Arm. current:		234-768	A	Ambient Temperature:	-20~40°C				
Field power:		3600	W	Altitude:	1000 m				
Resistance:		0,01493-0,1377	Ω	Protection Degree:	IP23				
Resistance:		0,59-5,3	mH	Cooling:	IC06				
Inductance:		5,47-9,03	mH	Mounting:	IM B (On request)				
Efficiency:		84,1-92,6	%	Vibration:	2,8 mm/s				
Weight:		1550	kg	Direction of Rotation:	Both				
Moment of inertia:		21,2	kg/m²	Coupling:	Flexible				
				Terminal Box:	VYBO-CB6				

Standards

Specification:	IEC60034-1
Test:	IEC60034-2
Noise:	IEC60034-9
Vibration:	IEC60034-14

Notes / Accessories

Bearing Information

	Drive End	Commutator End
Bearing:	6320/C3	6218/C3

Blower motor data

Air volume:	4000	m3/h
Static pressure:	1600	Pa
Motor output:	4,0	kW

Technical data for 1GDC

Frame reference and size		Rated Power	Full load speed in revolutions per minute		Speed with field weakened	Arm. current	Field power	Arm. circuit resistance	Arm. circuit resistance	Field inductance	Efficiency	Moment of Inertia	Weight
		PN	400V	440V	NF	LN	PF	R	LA	LF	Eff.	GD²	
Type		KW	r/min		r/min	A	W	(Ω (20°C)	mH	H	%	kg.m²	Kg
1GDC-280-	32	284	1360		1800	768	3600	0,01493	0,59	6,94	91,7	21,2	1550
		315		1500							92,6		
	31	198	900		2000	545		0,0314	1,1	5,54	89,7		
		220		1000							90,6		
	32	144	675		1700	402		0,0532	2	5,47	87,8		
		160		750							89,1		
	31	118	540		1000	339		0,0839	2,6	5,77	85,4		
		132		600							86,8		
	31	80	450		1400	234		0,1377	5,3	9,03	84,1		
		90		500							85,4		