

# Data sheet

25.06.2021 MADE WITH VEM EKAT V10.9



Manufacturer

Customer

**VEM motors GmbH - Werk Wernigerode**  
Carl-Friedrich-Gauß-Straße 1

**38855 WERNIGERODE**  
Deutschland

## Three-phase motors with squirrel cage rotor, Housing grey cast iron

Type	IE3-W43R 225 M4 PT NS LL SPM HW		
Design output	( kW )	45	49
Design torque	( Nm )	291	263
Voltage	( V )	400/690	460
Connection	[ - ]	D	Y
Design frequency	( Hz )	50	60
Class IE	[ - ]	IE3-94,3%	IE3-95%
Efficiency100/75/50 %	[ % ]	94,3 / 94,8 / 94,7	95 / 95,1 / 94,7
Efficiency determination		EN 60034-2-1	
Power factor	[ - ]	0,83	0,83
Duty type		S1	
Design speed	[rpm]	1475	1780
Current	[ A ]	83.0	48.1
Relative pull-in current	[ - ]	7,2	7,4
Relative starting torque	[ - ]	2,5	2,6
Relative pull-up torque	[ - ]	2	2
Relative pull-out torque	[ - ]	2,4	2,5
Th. cl.		155(F/B)	
Coolant temperature	( °C )	45°C	
Altitude above sea level	( m )	1000m	
Degree of protection IP		IP55	
Moment of inertia	( kgm² )	0,525	
Motor weight	( kg )	377	
Bearing, D-side		6314 C3	
Bearing, N-side		6312 C3	
Relubrication interval	( h )	4000	
Grease type		ASONIC GHY 72	
Grease amount	[cm³]	41/35	
A-sound pressure level	( dB )	66	

available power at Temperature of cooling medium 45°C and Altitude above sea level 1000m : 42.8 kW/46.5 kW

## Options

Type of mounting	IM B3
Flange	-
Terminal box	Standard
Position of terminal box	on the top
Cable gland	Sealing plug
Position of cable entry	right
Shaft	Standard, 1 shaft end
Bearing	Relubrication device, easy bearing arrangement
Special details to bearings	Fixed bearing, N-side
nipple)	Design version with SPM (vibration meas.) bearing monitoring (prep. with
Bearing monitoring	PT100 D+N-side
Winding protection	3xPt 100 (2 wires connection)
Limit values to vibration velocity	Class A
Colour system	Balancing with half key
Delivery conditions and/or official regulations:	04 maritime/harbour climate (KK C3-C4), RAL 7031 blue-grey IEC / EN 60034-1

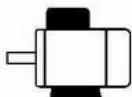
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Three-phase motors with squirrel cage rotor,  
Housing grey cast iron

**IE3-W43R 225 M4 PT NS LL SPM HW**

## Mounting position



Type of mounting: IM B3

**Flange:** -

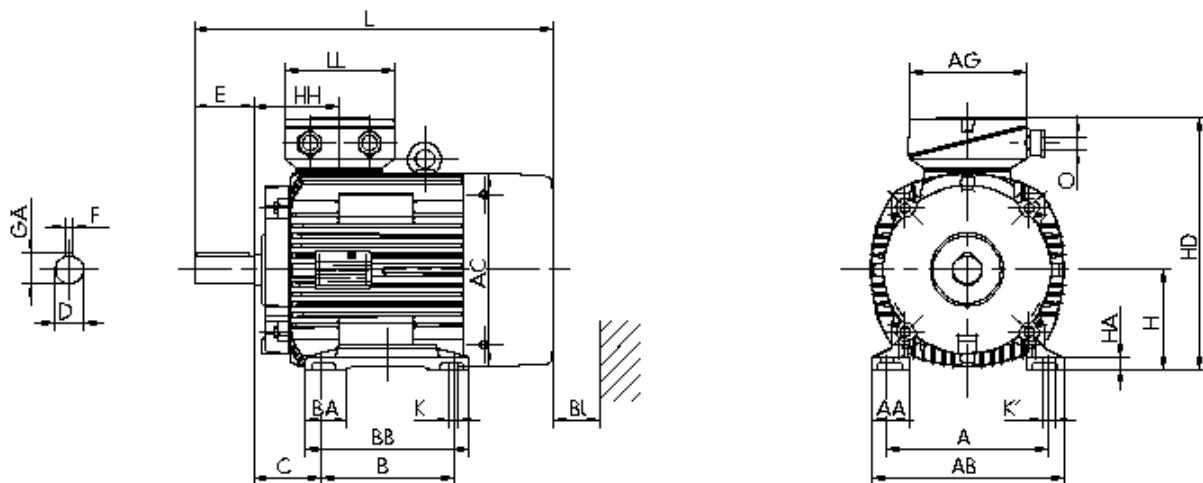
Position of terminal box: on the top

Brake type:

### Forced-ventilation:

Terminal box: KK 100 A

Cable gland O: 1 xSealing plug



Motor		Protection cover										Terminal box		
A 356	AA 75	AB 413	AC 440	AD -	B 311	B' 	BA 75	BA' -	BB 368	C 149	CA -	K 19	K' 25	
L 862	LC -	H 225	HA 25	HD 551	HH 177	BI 90	L -	AG 213	LL 207	BE -	AH -			

Flange							Tolerances			
	P	N	LA	M	T	S	H	N	D	DA
-	-	-	-	-	-	-	-0.5	h6	m6	m6

Shaft-DS					Shaft-NS			
D	E	GA	F	DB	DA	EA	GC	FA
60	140	64	18	DIN 332 DS- M20	-	-	-	-

DB...Centre hole

Delivery conditions and/or official regulations: IEC / EN 60034-1

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