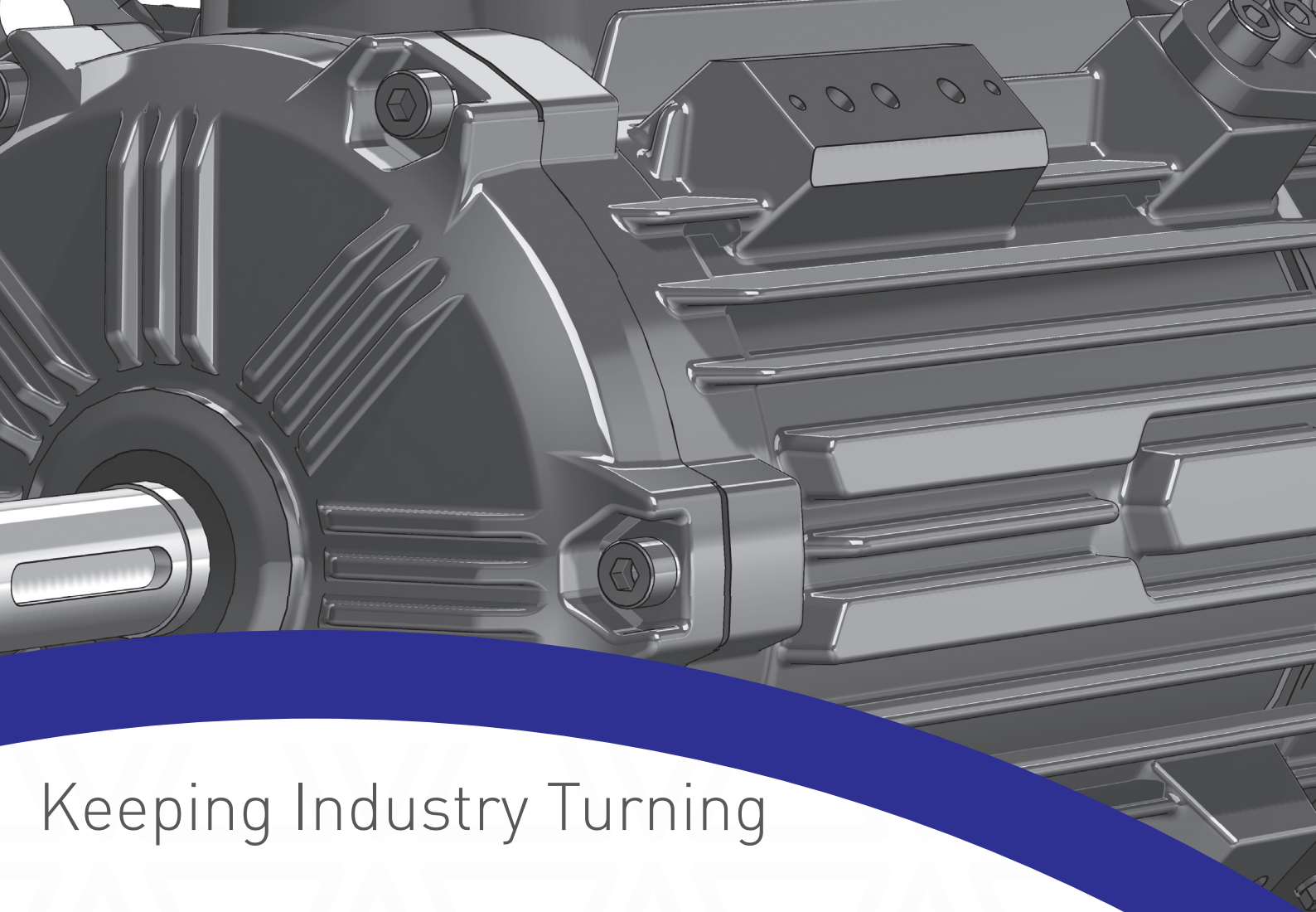




Keeping Industry Turning

WEX3 Flameproof motors

Frame sizes 80 to 315



Introduction

2

WEX3 IE3 flameproof specification

Specification		
	Standard product	Option
Frame sizes	80 - 315	-
Ex Protection	Ex db IIB T4 Gb	Ex db IIC T4 Gb, Exdb eb IIB / IIC T4 Gb Ex tb IIB / IIIC T130°C Db
Enclosure	IP55	IP56, IP65, IP66
Mounting option	Foot (B3), Flange (B5), Face (B14), Flange (V1), etc	Foot & Flange (B35), Foot & Face (B34), etc
Terminal box position	80 - 280: Top 315: Top	Right hand side, left hand side (from stock) Right hand side, left hand side (built to order)
Voltage	3 kW and below: 230 / 400 4 kW and above: 400 / 690	on request on request
Frequency	50 Hz	60 Hz
Cooling	IC411	-
Bearing location	Drive end	Non drive end
Lubrication	80 - 180 double-shielded bearings 200 - 315 regreasing facility	160 - 180 Regreasing facility -
Insulation	class F	class H
Temperature rise	class B	class B
Paint colour	water blue (RAL 5021) , Fan cover (RAL 9005)	on request
Paint Specification (equivalent to IEC 12944)	C3	C4, C5 or Cx
Thermal protection	80 - 315 (by thermistors)	RTDs 160 to 355
Anti-condensation heaters	80 - 132 single voltage 110V 160 - 315 dual voltage 110 / 230V	230V -
Inverter Duty (with derate)	Variable Torque: 10:1 Constant Torque: 2:1, 3:1, 4:1, 5:1, 10:1 Constant Power: 1:1.5 (50 - 75Hz)	Variable speed Variable speed -
Ambient temperature	-20°C to + 40°C	-40°C to +60°C

The above specification and options give a brief summary of features available for the WEX3 flameproof range.
For a full listing of optional features, please contact Brook Crompton sales.

Brook Crompton Keeping Industry Turning

Brook Crompton, the original innovator in electric motor development, is a leading provider of energy efficient electric motors. With over 120 years' technical & design expertise, UK-based Brook Crompton delivers consistently reliable electric motors to a global market.

Trusted to power limitless industrial activities across diverse market sectors, the robust design of Brook Crompton's electric motors drives fans, pumps, compressors, conveyors and more, every second, of every day, of every year.

Renowned for their adaptability, Brook Crompton's extensive motor stock can be modified to suit the needs of different market sectors, with technical support from the company's knowledgeable team readily available to ensure the correct selection of motors for any application.

For bespoke situations and complete flexibility, Brook Crompton will design and manufacture to meet individual customer specifications.

Brook Crompton has a long-standing reputation for efficient customer service, supporting customers worldwide through its global network. Specialist Brook Crompton Motor Centres operate alongside approved product distributors throughout the UK, mainland Europe, Middle East, Canada, USA, and Asia Pacific.

Shaping the future of electric motors, Brook Crompton is focused on the development of new products that improve energy efficiency, offer lower cost of ownership throughout the motor lifetime and reduce environmental impact.

Brook Crompton, the original innovator in electric motors.

Quality assurance

Stringent quality procedures are observed from first design to finished product in accordance with the ISO 9001 documented quality systems.

All factories have been assessed to meet these requirements.

WEX3 Exdb / eb flameproof range

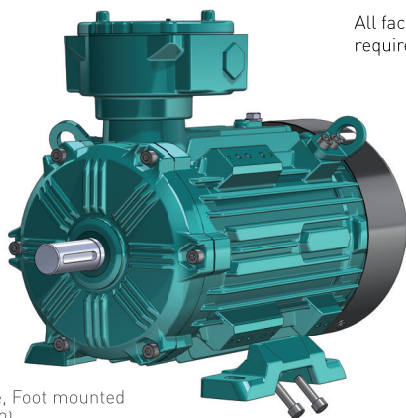
These motors are designed, tested and manufactured in accordance with the latest IEC / EN standards.

Outputs range from 0.37kW to 200kW with smaller or larger outputs available on request.

Frame sizes 80 to 315.

Benefits include:

- II 2G Ex db T4 stocked
- flexi-mount foot design
- 4-position cable entry
- IP55 protection
- Thermal protection as standard
- Anti-condensation heaters as standard
- Variable speed drive complaint
- IEC 12944 equivalent paint system
- Ex db IIC, Ex db eb, Ex tb available on request
- 3 Year warranty as standard
- Certified to ATEX and IECEx



WEX3 112 frame, Foot mounted
(B3)

Standards, environment & efficiency

Standards

The WEX range of motors are manufactured to the international standards listed below:

Standards		
Motors of cast iron construction are manufactured to the following international standards listed below:		
Standard	IEC	EN
Outputs	IEC 60072-1	EN 60072-1
Performance	IEC 60034-1	EN 60034-1
Dimensions	IEC 60072-1	EN 60072-1
Mounting	IEC 60034-7	EN 60034-7
Degrees of protection	IEC 60034-5	EN 60034-5
Starting	IEC 60034-12	EN 60034-12
Noise	IEC 60034-9	EN 60034-9
Efficiency	IEC 60034-30	EN 60034-30
Ex db	IEC 60079-0, IEC 60079-1	EN 60079-0, EN 60079-1
Ex db eb	IEC 60079-0, IEC 60079-1, IEC 60079-7	EN 60079-0, EN 60079-1, EN 60079-7
Ex tb / tc	IEC 60079-0, IEC 60079-31	EN 60079-0, EN 60079-31
Motors complying with IEC 60034-1 also comply with many of the national standards of other European countries.		

Environment Enclosure

All motors have degrees of IP protection as defined in EN 60034-5.

The standard arrangement is IP55.

See Specification on page 2 for alternatives.

Motor cooling

Motors are cooled in accordance with EN 60034-6.

The standard arrangement is IC411 (Totally Enclosed Fan Ventilated) via a fan mounted at the non-drive end.

European directives and regulations

Compliance with European Directives & Regulations applying to AC induction motors					
Directives / Regulation	ATEX	Low voltage (LV)	Machinery (MD)	Electromagnetic compatibility (EMC)	Ecodesign regulation (ErP)
Reference numbers	2014/34/EU	2014/35/EU	2006/42/EC ⁽³⁾	2014/30/EU	2019/1781 ⁽⁴⁾
Motor CE	Yes	Yes	No	No	Yes
Standards	EN 60079-0,-1,-7,-31	EN 60034	Not applicable	EN 60034-1	EN 60034-30
Documentation for customers technical file	Declaration of conformity	Declaration of conformity	Declaration of incorporation	Statement ⁽¹⁾	Declaration of conformity
Safety instructions with every motor	Yes	Yes	Yes	Yes	-
Comment	Hazardous atmosphere equipment - mandatory	Relevant electrical equipment operating between 50 to 1000 volts AC	Statement ⁽²⁾	Component	Minimum efficiency levels (see Ecodesign requirements AC induction motors below)
⁽¹⁾ Motors operating from a correctly applied, sinusoidal (AC) supply meet the requirements of the EMC directive and are within the limits specified in standard EN 60034-1					
⁽²⁾ When installed in accordance with our customer safety and installation and maintenance instructions, they can be put into service only when the machinery into which they are being incorporated, has been declared to be in conformity with the machinery directive in accordance with Article 6 (2) and Annex II, Part 1, Section B.					
⁽³⁾ Machinery Directive 2006/42/EC to be repealed in January 2027, replaced by Regulation (EU) 2023/1230.					
⁽⁴⁾ And amending Regulation (EU) 2021/341.					

Performance data



4 2 pole (3000min⁻¹)

Rated power		Full load speed in revolutions per minute		Frame reference and size		Full load current at rated voltage			Efficiency		Power factor	Full load torque		Direct on line starting torque ratio		Direct on line pull up torque ratio		Direct on line pull out torque ratio		Direct on line starting current ratio		Star delta starting torque ratio		Star delta pull up torque ratio		Star delta starting current ratio		Rotor inertia WK ²		Mean sound pressure level (q 1m on no load	
P _N				I _N			η	cos φ																							
kW (hp)	n min ⁻¹	Type		230V A	400V A	690V A	1.0 P _N 0.75 P _N 0.5 P _N	1.0 P _N 0.75 P _N 0.5 P _N		M _N Nm	M _A M _N	M _S M _N	M _R M _N	I _A I _N	M _A M _N	M _S M _N	I _A I _N	J kgm ²	L _{PA} dB(A)												
0.75 (1.0)	2864	WEX3-80M1-2	IE3	2.78	1.60	-	80.7 81.4 80.1	0.83 0.79 0.71		2.5	3.1	2.8	3.2	6.6	-	-	-	0.0012	56												
1.1 (1.5)	2852	WEX3-80M2-2	IE3	4.00	2.30	-	82.7 83.2 82.3	0.83 0.81 0.73		3.7	3.1	2.8	3.2	6.6	-	-	-	0.0014	56												
1.5 (2.0)	2881	WEX3-90S-2	IE3	5.39	3.10	-	84.2 85.4 83.8	0.84 0.81 0.75		5.0	2.9	2.6	3.4	7.3	-	-	-	0.0016	64												
2.2 (3.0)	2881	WEX3-90L-2	IE3	8.17	4.70	-	85.9 86.8 85.1	0.85 0.80 0.74		7.3	3.6	3.3	3.7	7.9	-	-	-	0.0018	64												
3.0 (4.0)	2907	WEX3-100L-2	IE3	10.1	5.8	-	87.1 88.9 87.2	0.87 0.83 0.77		9.9	2.6	2.3	3.1	8.2	-	-	-	0.0058	68												
4.0 (5.5)	2903	WEX3-112M-2	IE3	-	7.5	4.3	88.1 88.7 88.2	0.88 0.84 0.77		13.2	2.5	2.2	3.6	7.6	0.8	0.7	2.4	0.0076	69												
5.5 (7.5)	2916	WEX3-132S1-2	IE3	-	10.3	6.0	89.2 89.5 88.3	0.88 0.84 0.77		18.0	3.0	2.7	3.9	8.7	0.9	0.8	2.7	0.0159	68												
7.5 (10)	2909	WEX3-132S2-2	IE3	-	13.6	7.9	90.1 91.1 90.4	0.89 0.86 0.80		24.6	3.0	2.7	3.8	8.4	0.9	0.8	2.6	0.0195	68												
11 (15)	2943	WEX3-160M1-2	IE3	-	20.0	11.6	91.2 91.8 91.5	0.89 0.86 0.80		35.7	2.9	2.6	3.8	7.9	0.9	0.8	2.5	0.05	67												
15 (20)	2940	WEX3-160M2-2	IE3	-	26.7	15.5	91.9 93.0 92.2	0.89 0.86 0.80		48.7	2.9	2.6	3.6	8.0	0.9	0.8	2.5	0.057	67												
18.5 (25)	2938	WEX3-160L-2	IE3	-	32.5	18.8	92.4 93.0 93.1	0.89 0.88 0.82		60.1	2.9	2.6	3.5	8.1	0.9	0.8	2.5	0.067	67												
22 (30)	2953	WEX3-180M-2	IE3	-	38.7	22.4	92.7 93.1 93.1	0.89 0.88 0.82		71.1	2.2	1.9	2.3	8.2	0.7	0.6	2.6	0.098	77												

Performance data

2 pole (3000min⁻¹)

Rated power		Full load speed in revolutions per minute		Frame reference and size		Full load current at rated voltage			Efficiency		Power factor	Full load torque		Direct on line starting torque ratio		Direct on line pull up torque ratio		Direct on line pull out torque ratio		Direct on line starting current ratio		Star delta starting torque ratio		Star delta pull up torque ratio		Star delta starting current ratio		Rotor inertia Wk ²		Mean sound pressure level @ 1m on no load	
P _N																															
kW (hp)	n min ⁻¹	Type			230V A	400V A	690V A	η 1.0 P _N 0.75 P _N	η 1.0 P _N 0.75 P _N	M _N Nm	M _A M _N	M _S M _N	M _K M _N	I _A I _N	M _A M _N	M _S M _N	I _A I _N	J kgm ²	L _{PA} dB(A)												
30 (40)	2970	WEX3-200L1-2	IE3	-	53.0	30.7	{ 93.3 0.89 93.6 0.88 93.2 0.82 }			96.5	2.2	1.9	2.3	7.5	0.7	0.6	2.3	0.20	79												
37 (50)	2968	WEX3-200L2-2	IE3	-	65	38	{ 93.7 0.89 94.1 0.87 93.5 0.81 }			119	2.2	1.9	2.3	7.5	0.7	0.6	2.3	0.23	79												
45 (60)	2966	WEX3-225M-2	IE3	-	78	45	{ 94.0 0.89 94.2 0.87 94.0 0.81 }			145	2.2	1.9	2.3	7.6	0.7	0.6	2.4	0.41	82												
55 (75)	2969	WEX3-250M-2	IE3	-	95	55	{ 94.3 0.89 94.7 0.88 94.3 0.82 }			177	2.2	1.9	2.3	7.6	0.7	0.6	2.4	0.48	82												
75 (100)	2978	WEX3-280S-2	IE3	-	128	74	{ 94.7 0.89 94.9 0.88 94.5 0.82 }			241	2.0	1.7	2.3	6.9	0.6	0.5	2.2	0.89	83												
90 (125)	2978	WEX3-280M-2	IE3	-	154	89	{ 95.0 0.89 95.1 0.88 94.8 0.82 }			289	2.0	1.7	2.3	7.0	0.6	0.5	2.2	1.08	83												
110 (150)	2975	WEX3-315S-2	IE3	-	187	108	{ 95.2 0.90 95.3 0.88 95.0 0.82 }			353	1.9	1.7	2.3	7.1	0.6	0.5	2.2	1.76	85												
132 (175)	2975	WEX3-315M-2	IE3	-	224	130	{ 95.4 0.90 95.5 0.88 95.2 0.82 }			424	1.9	1.7	2.2	7.1	0.6	0.5	2.2	1.88	85												
160 (215)	2975	WEX3-315L1-2	IE3	-	260	151	{ 95.6 0.91 95.8 0.88 95.3 0.82 }			514	1.9	1.7	2.2	7.1	0.6	0.5	2.2	2.077	85												
185 (250)	2976	WEX3-315L-2	IE3	-	314	182	{ 95.7 0.91 95.8 0.88 95.6 0.82 }			594	1.9	1.7	2.2	7.1	0.6	0.5	2.2	2.35	85												
200 (270)	2979	WEX3-315L2-2	IE3	-	333	193	{ 95.8 0.91 96.0 0.88 95.7 0.82 }			641	1.9	1.7	2.2	7.1	0.6	0.5	2.2	2.77	85												

Performance data



6 4 pole (1500min⁻¹)

Rated power	Full load speed in revolutions per minute	Frame reference and size			Full load current at rated voltage			Efficiency	Power factor	Full load torque	Direct on line starting torque ratio	Direct on line pull up torque ratio	Direct on line pull out torque ratio	Direct on line starting current ratio	Star delta starting torque ratio	Star delta pull up torque ratio	Star delta starting current ratio	Rotor inertia WK ²	Mean sound pressure level (q 1m on no load		
					I _N															η	cos φ
					P _N	n	Type													230V A	400V A
kW (hp)	min ⁻¹	Type																			
0.55 (0.75)	1430	WEX3-80M1-4	IE3	2.26	1.3	-	{ 80.8 80.6 80.3 }	{ 0.75 0.65 0.50 }	3.7	2.3	2.0	2.3	6.3	-	-	-	0.0024	50			
0.75 (1.0)	1435	WEX3-80M2-4	IE3	3.13	1.8	-	{ 82.5 83.7 82.1 }	{ 0.75 0.65 0.51 }	5.0	2.3	2.0	2.3	6.5	-	-	-	0.003	50			
1.1 (1.5)	1422	WEX3-90S-4	IE3	4.35	2.5	-	{ 84.1 85.6 85.4 }	{ 0.75 0.70 0.63 }	7.4	2.3	2.0	2.3	6.6	-	-	-	0.0036	53			
1.5 (2.0)	1421	WEX3-90L-4	IE3	5.91	3.4	-	{ 85.3 86.5 86.7 }	{ 0.75 0.70 0.63 }	10.1	2.3	2.0	2.3	6.9	-	-	-	0.0045	53			
2.2 (3.0)	1447	WEX3-100L1-4	IE3	8.0	4.6	-	{ 86.7 86.9 86.2 }	{ 0.81 0.76 0.64 }	14.5	2.3	2.0	2.3	7.5	-	-	-	0.011	56			
3.0 (4.0)	1442	WEX3-100L2-4	IE3	10.4	6.0	-	{ 87.7 88.4 87.5 }	{ 0.82 0.77 0.67 }	19.9	2.3	2.0	2.3	7.6	-	-	-	0.014	56			
4.0 (5.5)	1433	WEX3-112M-4	IE3	-	7.9	4.6	{ 88.6 88.7 88.8 }	{ 0.82 0.77 0.66 }	26.7	2.5	2.2	3.2	7.8	0.8	0.7	2.4	0.02	57			
5.5 (7.5)	1457	WEX3-132S-4	IE3	-	10.8	6.3	{ 89.6 90.2 89.7 }	{ 0.82 0.77 0.67 }	36.1	2.0	1.7	2.3	7.5	0.6	0.5	2.3	0.033	57			
7.5 (10)	1455	WEX3-132M-4	IE3	-	14.9	8.6	{ 90.4 91.3 91.0 }	{ 0.83 0.78 0.69 }	49.2	2.0	1.7	2.3	7.4	0.6	0.5	2.3	0.037	57			
11 (15)	1469	WEX3-160M-4	IE3	-	20.5	11.9	{ 91.4 92.3 91.6 }	{ 0.85 0.81 0.70 }	71.5	2.2	1.9	2.3	7.5	0.7	0.6	2.3	0.094	66			
15 (20)	1469	WEX3-160L-4	IE3	-	27.7	16.1	{ 92.1 93.0 92.2 }	{ 0.86 0.81 0.70 }	97.5	2.2	1.9	2.3	7.5	0.7	0.6	2.3	0.11	66			
18.5 (25)	1479	WEX3-180M-4	IE3	-	33.5	19.4	{ 92.6 92.9 92.6 }	{ 0.86 0.81 0.71 }	119	2.3	2.0	2.8	7.0	0.7	0.6	2.2	0.21	68			
22 (30)	1479	WEX3-180L-4	IE3	-	40.0	23.2	{ 93.0 93.4 93.2 }	{ 0.86 0.81 0.71 }	142	2.3	2.0	2.8	7.0	0.7	0.6	2.2	0.23	68			

Performance data

4 pole (1500min⁻¹)

Rated power		Full load speed in revolutions per minute		Frame reference and size		Full load current at rated voltage			Efficiency	Power factor	Full load torque		Direct on line starting torque ratio	Direct on line pull up torque ratio	Direct on line pull out torque ratio	Direct on line starting current ratio	Star delta starting torque ratio	Star delta pull up torque ratio	Star delta starting current ratio	Rotor inertia Wk²	Mean sound level (A)
P _N						I _N			η	cos φ											
kW (hp)	n min ⁻¹	Type			230V A	400V A	690V A	1.0 P _N 0.75 P _N 0.5 P _N	1.0 P _N 0.75 P _N 0.5 P _N	M _N Nm	M _A M _N	M _S M _N	M _R M _N	I _A I _N	M _A M _N Y	M _S M _N Y	I _A I _N Y	J kgm²	L _{pa} dB(A)		
30 (40)	1478	WEX3-200L-4	IE3	-	54	31	{ 93.6 0.86 94.0 0.82 93.6 0.72 }			194	2.2	1.9	2.3	7.2	0.7	0.6	2.3	0.42	71		
37 (50)	1480	WEX3-225S-3	IE3	-	65	38	{ 93.9 0.86 94.1 0.82 94.0 0.75 }			239	2.7	2.4	2.6	7.6	0.8	0.8	2.4	0.49	65		
45 (60)	1479	WEX3-225M-4	IE3	-	79	46	{ 94.2 0.86 94.5 0.84 94.4 0.77 }			291	2.7	2.4	2.6	7.4	0.8	0.8	2.3	0.55	65		
55 (75)	1482	WEX3-250M-4	IE3	-	95	55	{ 94.6 0.86 95.1 0.83 94.4 0.74 }			354	2.5	2.2	2.6	6.6	0.8	0.7	2.1	0.89	70		
75 (100)	1486	WEX3-280S-4	IE3	-	130	75	{ 95.0 0.88 95.2 0.85 94.8 0.78 }			482	3.3	3.0	3.3	7.8	1.0	0.9	2.4	1.55	77		
90 (125)	1486	WEX3-280M-4	IE3	-	160	93	{ 95.2 0.88 95.5 0.85 95.1 0.78 }			578	3.4	3.1	3.3	7.9	1.1	1.0	2.5	1.86	77		
110 (150)	1488	WEX3-315S-4	IE3	-	187	108	{ 95.4 0.89 95.6 0.85 95.2 0.78 }			706	1.9	1.7	3.2	6.5	0.6	0.5	2.0	3.57	77		
132 (175)	1489	WEX3-315M-4	IE3	-	224	130	{ 95.6 0.89 95.8 0.85 95.3 0.78 }			847	2.2	1.9	3.4	6.9	0.7	0.6	2.2	4.2	77		
160 (215)	1487	WEX3-315L1-4	IE3	-	271	157	{ 95.8 0.89 96.0 0.85 95.6 0.78 }			1028	1.8	1.6	2.9	5.9	0.6	0.5	1.8	4.66	78		
185 (250)	1487	WEX3-315L-4	IE3	-	313	181	{ 95.9 0.89 96.0 0.85 95.6 0.78 }			1188	1.9	1.7	2.9	5.9	0.6	0.5	1.8	4.83	78		
200 (270)	1487	WEX3-315L2-4	IE3	-	338	196	{ 96.0 0.89 96.2 0.85 95.7 0.78 }			1284	1.9	1.7	2.9	5.9	0.6	0.5	1.8	5.42	78		

Performance data



8

6 pole (1000min⁻¹)

Rated power		Full load speed in revolutions per minute		Frame reference and size	Full load current at rated voltage			Efficiency	Power factor	Full load torque		Direct on line starting torque ratio	Direct on line pull up torque ratio	Direct on line pull out torque ratio	Direct on line starting current ratio	Star delta starting torque ratio	Star delta pull up torque ratio	Star delta starting current ratio	Rotor inertia WK ²	Mean sound pressure level (q 1m on no load
P _N					I _N			η	cos φ											
kW (hp)	n min ⁻¹	Type		230V A	400V A	690V A	1.0 P _N 0.75 P _N 0.5 P _N	1.0 P _N 0.75 P _N 0.5 P _N	M _N Nm	M _A M _N	M _S M _N	M _K M _N	I _A I _N	M _A M _N Y	M _S M _N Y	I _A I _N Y	J kgm ²	L _{PA} dB(A)		
0.37 (0.55)	908	WEX3-80M1-6	IE3	1.74	1.0	-	73.5 73.4 73.3	0.70 0.62 0.50	3.9	1.9	1.7	2.0	4.7	-	-	-	0.0031	49		
0.55 (0.75)	914	WEX3-80M2-6	IE3	2.43	1.4	-	77.2 76.9 76.5	0.72 0.62 0.47	5.8	1.9	1.7	2.1	4.7	-	-	-	0.0040	49		
0.75 (1.0)	945	WEX3-90S-6	IE3	3.3	1.9	-	78.9 80.1 78.1	0.72 0.65 0.57	7.6	2.1	1.8	21	5.8	-	-	-	0.0058	49		
1.1 (1.5)	939	WEX3-90L-6	IE3	4.7	2.7	-	81.0 81.4 80.5	0.73 0.66 0.57	11.2	2.1	1.8	2.1	5.9	-	-	-	0.0074	49		
1.5 (2.0)	953	WEX3-100L-6	IE3	6.1	3.5	-	82.5 82.9 82.2	0.74 0.69 0.58	15.0	2.1	1.8	2.1	6.0	-	-	-	0.016	53		
2.2 (3.0)	945	WEX3-112M-6	IE3	8.9	5.1	-	84.3 84.2 83.5	0.74 0.69 0.57	22.2	2.1	1.8	2.1	6.0	-	-	-	0.021	57		
3.0 (4.0)	957	WEX3-132S-6	IE3	11.3	6.5	-	85.6 86.3 85.6	0.74 0.67 0.55	29.9	2.0	1.7	2.1	6.2	-	-	-	0.025	62		
4.0 (5.5)	958	WEX3-132M1-6	IE3	-	8.6	5.0	86.8 87.6 87.2	0.74 0.68 0.56	39.9	2.0	1.7	2.1	6.8	0.6	0.5	2.1	0.035	62		
5.5 (7.5)	960	WEX3-132M2-6	IE3	-	11.7	6.8	88.0 89.4 88.0	0.75 0.70 0.58	54.7	2.0	1.7	2.1	7.1	0.6	0.5	2.2	0.048	62		
7.5 (10)	971	WEX3-160M-6	IE3	-	15.6	9.0	89.1 89.6 89.3	0.78 0.73 0.60	73.8	2.1	1.8	2.1	6.7	0.7	0.6	2.1	0.120	62		
11 (15)	971	WEX3-160L-6	IE3	-	22.5	13.0	90.3 90.9 90.5	0.78 0.74 0.63	108	2.1	1.8	2.1	6.9	0.7	0.6	2.2	0.170	62		
15 (20)	976	WEX3-180L-6	IE3	-	30.3	17.6	91.2 91.8 91.8	0.81 0.76 0.66	147	2.0	1.7	2.1	7.2	0.6	0.5	2.3	0.27	62		

Performance data

6 pole (1000min⁻¹)

Rated power		Full load speed in revolutions per minute		Frame reference and size		Full load current at rated voltage			Efficiency	Power factor	Full load torque		Direct on line starting torque ratio	Direct on line pull up torque ratio	Direct on line pull out torque ratio	Direct on line starting current ratio	Star delta starting torque ratio	Star delta pull up torque ratio	Star delta starting current ratio	Rotor inertia Wk ²	Mean sound pressure level (d 1m on no load
P _N						I _N			η	cos φ											
kW (hp)	n min ⁻¹	Type				230V A	400V A	690V A	1.0 P _N 0.75 P _N 0.5 P _N	1.0 P _N 0.75 P _N 0.5 P _N	M _N Nm	M _A M _N	M _S M _N	M _K M _N	I _A I _N	M _A M _N Y	M _S M _N Y	I _A I _N Y	J kgm ²	L _{PA} dB(A)	
18.5 (25)	982	WEX3-200L1-6	IE3	-	38	22	{ 91.7 92.2 92.0 }		{ 0.81 0.76 0.67 }		180	2.1	1.8	2.1	7.2	0.7	0.6	2.3	0.41	68	
22 (30)	981	WEX3-200L2-6	IE3	-	42	24	{ 92.2 92.6 92.1 }		{ 0.82 0.77 0.67 }		214	2.1	1.8	2.1	7.3	0.7	0.6	2.3	0.47	68	
30 (40)	980	WEX3-225M-6	IE3	-	58	34	{ 92.9 93.1 92.7 }		{ 0.81 0.77 0.67 }		292	2.0	1.7	2.1	7.1	0.6	0.5	2.2	0.97	68	
37 (50)	986	WEX3-250M-6	IE3	-	68	39	{ 93.3 93.7 93.5 }		{ 0.84 0.80 0.70 }		358	2.1	1.8	2.1	7.1	0.7	0.6	2.2	1.29	70	
45 (60)	988	WEX3-280S-6	IE3	-	83	48	{ 93.7 94.1 93.8 }		{ 0.86 0.82 0.75 }		435	2.1	1.8	2.0	7.2	0.7	0.6	2.3	2.71	72	
55 (75)	988	WEX3-280M-6	IE3	-	98	57	{ 94.1 94.3 94.1 }		{ 0.86 0.82 0.75 }		532	2.1	1.8	2.0	7.2	0.7	0.6	2.3	3.35	72	
75 (100)	987	WEX3-315S-6	IE3	-	135	78	{ 94.6 94.7 94.2 }		{ 0.85 0.82 0.75 }		726	2.0	1.7	2.0	6.7	0.6	0.5	2.1	4.12	73	
90 (125)	987	WEX3-315M-6	IE3	-	160	93	{ 94.9 95.1 94.6 }		{ 0.84 0.82 0.75 }		871	2.0	1.7	2.0	6.7	0.6	0.5	2.1	4.87	73	
110 (150)	987	WEX3-315L1-6	IE3	-	196	114	{ 95.1 95.2 94.8 }		{ 0.85 0.82 0.75 }		1064	2.0	1.7	2.0	6.7	0.6	0.5	2.1	5.42	73	
132 (175)	987	WEX3-315L2-6	IE3	-	232	134	{ 95.4 95.5 95.2 }		{ 0.86 0.83 0.75 }		1277	2.0	1.7	2.0	6.7	0.6	0.5	2.1	6.44	73	
160 (215)	991	WEX3-355S-6	IE3	-	278	161	{ 95.6 95.6 95.2 }		{ 0.87 0.83 0.75 }		1542	2.0	1.7	2.0	6.7	0.6	0.5	2.1	10.1	79	

Performance data



10 8 pole (750min⁻¹)

Rated power		Full load speed in revolutions per minute		Frame reference and size	Full load current at rated voltage			Efficiency	Power factor	Full load torque	Direct on line starting torque ratio	Direct on line pull up torque ratio	Direct on line pull out torque ratio	Direct on line starting current ratio	Star delta starting torque ratio	Star delta pull up torque ratio	Star delta starting current ratio	Rotor inertia WK ²	Mean sound pressure level (q 1m on no load
P _N					I _N			η	cos φ										
kW (hp)	n min ⁻¹	Type		230V A	400V A	690V A	1.0 P _N 0.75 P _N 0.5 P _N	1.0 P _N 0.75 P _N 0.5 P _N	M _N Nm	M _A M _N	M _S M _N	M _K M _N	I _A I _N	M _A M _N Y	M _S M _N Y	I _A I _N Y	J kgm ²	L _{PA} dB(A)	
0.75 (1.0)	703	WEX3-100L1-8	IE3	3.8	2.2	-	{ 75.0 0.67 74.2 0.59 73.9 0.46 }		10.2	1.8	1.6	2.0	4.0	-	-	-	0.012	51	
1.1 (1.5)	714	WEX3-100L2-8	IE3	5.2	3.0	-	{ 77.7 0.67 77.2 0.60 76.7 0.46 }		14.7	1.8	1.6	2.0	5.0	-	-	-	0.016	51	
1.5 (2.0)	719	WEX3-112M-8	IE3	6.6	3.8	-	{ 79.7 0.71 78.8 0.62 78.1 0.49 }		19.9	1.8	1.6	2.0	5.0	-	-	-	0.023	53	
2.2 (3.0)	712	WEX3-132S-8	IE3	9.6	5.5	-	{ 81.9 0.71 80.4 0.63 80.0 0.50 }		29.5	1.8	1.6	2.0	6.0	-	-	-	0.029	56	
3.0 (4.0)	713	WEX3-132M-8	IE3	12.4	7.1	-	{ 83.5 0.73 82.2 0.65 81.5 0.51 }		40.2	1.8	1.6	2.0	6.0	-	-	-	0.04	56	
4.0 (5.5)	727	WEX3-160M1-8	IE3	-	9.3	5.4	{ 84.8 0.73 84.3 0.65 84.1 0.52 }		52.5	1.9	1.7	2.0	6.0	0.6	0.5	1.9	0.082	60	
5.5 (7.5)	726	WEX3-160M2-8	IE3	-	12.4	7.2	{ 86.2 0.74 85.9 0.67 85.7 0.54 }		72.3	1.9	1.7	2.0	6.0	0.6	0.5	1.9	0.1	60	
7.5 (10)	728	WEX3-160L-8	IE3	-	16.5	9.6	{ 87.3 0.75 87.0 0.69 86.8 0.56 }		98.4	1.9	1.7	2.0	6.0	0.6	0.5	1.9	0.14	60	
11 (15)	734	WEX3-180L-8	IE3	-	23.9	13.9	{ 88.6 0.75 88.4 0.69 88.1 0.56 }		143	2.0	1.7	2.0	6.5	0.5	0.5	2.0	0.26	62	

Performance data

8 pole (750min⁻¹)

Rated power		Full load speed in revolutions per minute		Frame reference and size		Full load current at rated voltage			Efficiency	Power factor	Full load torque		Direct on line starting torque ratio	Direct on line pull up torque ratio	Direct on line pull out torque ratio	Direct on line starting current ratio	Star delta starting current ratio	Star delta pull up torque ratio	Star delta starting current ratio	Rotor inertia WK ²	Mean sound level (dBA)
P _N					I _N			η	cos φ												
kW (hp)	n min ⁻¹	Type			230V A	400V A	690V A	1.0 P _N 0.75 P _N 0.5 P _N	1.0 P _N 0.75 P _N 0.5 P _N	M _N Nm	M _A M _N	M _S M _N	M _R M _N	I _A I _N	M _A M _N Y	M _S M _N Y	I _A I _N Y	J kgm ²	L _{PA} dB(A)		
15 (20)	734	WEX3-200L-8	IE3	-	31.8	18.0	89.6 89.2 89.0 0.76 0.69 0.57			195	2.0	1.7	2.0	6.6	0.6	0.5	2.1	0.51	65		
18.5 (25)	737	WEX3-225S-8	IE3	-	39	23	90.1 89.8 89.7 0.76 0.70 0.58			240	1.9	1.7	2.0	6.6	0.6	0.5	2.1	0.76	65		
22 (30)	737	WEX3-225M-8	IE3	-	49	28	90.6 90.2 90.0 0.78 0.72 0.60			285	1.9	1.7	2.0	6.6	0.6	0.5	2.1	0.87	65		
30 (40)	739	WEX3-250M-8	IE3	-	60	35	91.3 91.0 90.8 0.79 0.72 0.60			388	1.9	1.7	2.0	6.5	0.6	0.5	2.0	1.34	67		
37 (50)	742	WEX3-280S-8	IE3	-	74	43	91.8 91.4 91.2 0.79 0.75 0.63			476	1.9	1.7	2.0	6.6	0.6	0.5	2.1	2.48	67		
45 (60)	743	WEX3-280M-8	IE3	-	89	52	92.2 92.0 91.5 0.79 0.75 0.63			578	1.9	1.7	2.0	6.6	0.6	0.5	2.1	3.00	67		
55 (75)	741	WEX3-315S-8	IE3	-	110	64	92.5 92.2 92.0 0.80 0.76 0.65			709	1.8	1.6	2.0	6.6	0.6	0.5	2.1	4.41	70		
75 (100)	741	WEX3-315M-8	IE3	-	145	84	93.1 93.0 93.1 0.80 0.76 0.65			967	1.8	1.6	2.0	6.2	0.6	0.5	1.9	5.66	70		
90 (125)	741	WEX3-315L1-8	IE3	-	174	101	93.4 93.2 93.1 0.80 0.78 0.66			1160	1.8	1.6	2.0	6.4	0.6	0.5	2.0	6.74	70		
110 (150)	741	WEX3-315L2-8	IE3	-	207	120	93.7 93.5 93.4 0.82 0.78 0.66			1418	1.8	1.6	2.0	6.4	0.6	0.5	2.0	8.00	70		

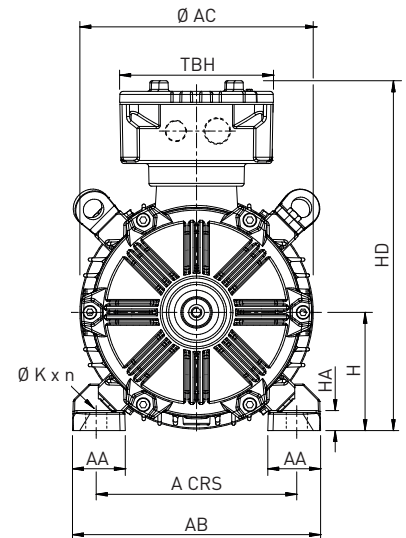
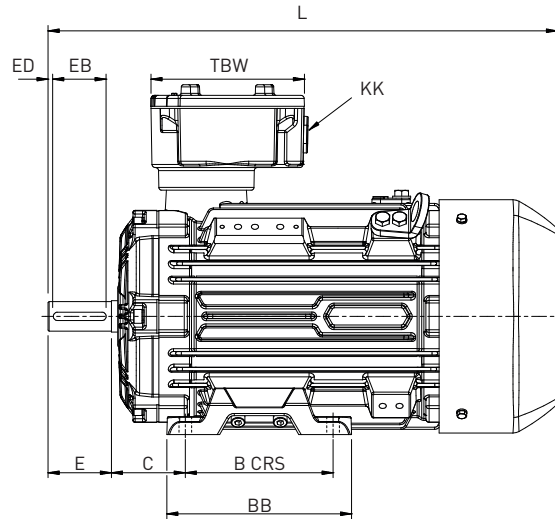
Dimensions - IEC specifications

12

Foot, flange and face mounting
Frame sizes 80 to 180 cast iron

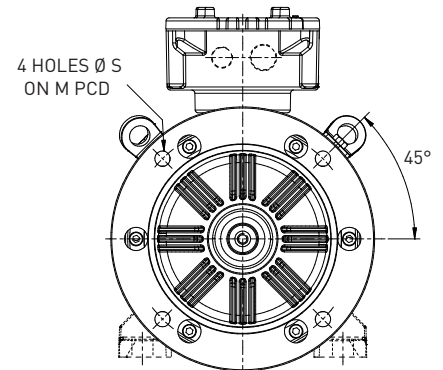
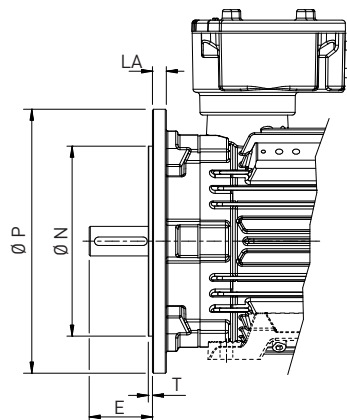
IM B3
IM 1001

Mounting options



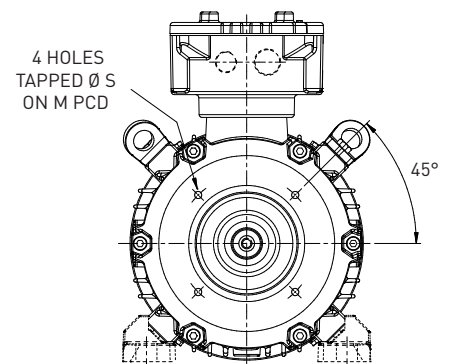
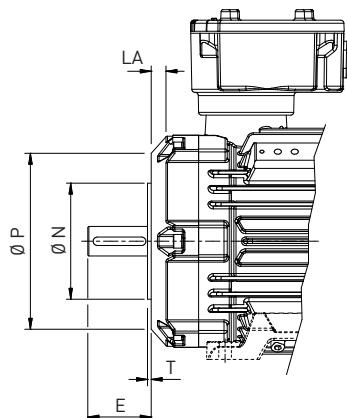
IM B5 / IM B35
IM 3001 / IM 2001

Mounting options



IM B14 / IM B34
IM 3601 / IM 2101

Mounting options



Dimensions - IEC specification

Foot, flange and face mounting
Frame sizes 80 to 180 cast iron

13

General Dimensions - WEX3

Type	A	B	C	H	K x n	L	AA	AB	Ø AC	BB	HA	HD	Exdb terminal box		
													TBW	TBH	KK
WEX3-80M	125	100	50	80	10 x 4	360	32	160	162	130	12	270	145	145	2 x CM20
WEX3-90S	140	100	56	90	10 x 4	427	34	180	175	155	12	286	145	145	2 x CM20
WEX3-90L	140	100	56	90	10 x 4	427	34	180	175	155	12	286	145	145	2 x CM20
WEX3-100L	160	140	63	100	12 x 4	465	38	200	212	175	15	315	145	145	2 x CM20
WEX3-112M	190	140	70	112	12 x 4	485	47	235	225	175	17	336	145	145	1 x CM25 & 1 X CM20
WEX3-132S	216	140	89	132	12 x 4	515	50	266	249	187	20	398	220	220	1 x CM25 & 1 X CM20
WEX3-132M	216	178	89	132	12 x 4	553	50	266	249	225	20	398	220	220	1 x CM25 & 1 X CM20
WEX3-160M	254	210	108	160	14.5 x 4	668	60	310	315	256	25	465	220	220	1 x CM32 & 1 X CM20
WEX3-160L	254	254	108	160	14.5 x 4	726	60	310	315	300	25	465	220	220	1 x CM32 & 1 X CM20
WEX3-180M	279	241	121	180	14.5 x 4	690	57	350	358	325	25	565	270	265	1 x CM32 & 1 X CM20
WEX3-180L	279	279	121	180	14.5 x 4	690	57	350	358	325	25	565	270	265	1 x CM32 & 1 X CM20

n - number of foot fixing holes.

TBW & TBH - show dimensions for Ex db box type, for Exdb eb see page 17

D Flange

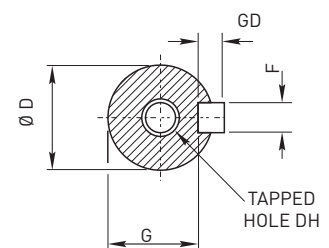
Type	IM B5 flange mounting					
	M	N	P	S	T	LA
WEX3-80	165	130	200	12	3.5	12
WEX3-90	165	130	200	12	3.5	10
WEX3-100	215	180	250	14.5	4	13
WEX3-112	215	180	250	14.5	4	13
WEX3-132	265	230	300	14.5	4	16
WEX3-160	300	250	350	18.5	5	16
WEX3-180	300	250	350	18.5	5	15

C Face

Type	IM B14 flange mounting					
	M	N	P	S	T	LA
WEX3-80	100	80	120	M6	3	12
WEX3-90	115	95	140	M8	3	21
WEX3-100	130	110	160	M8	3.5	13
WEX3-112	130	110	160	M8	3.5	17.5

Shaft

Type	All poles							
	Ø D	E	F	G	GD	EB	ED	DH
WEX3-80	19	40	6	15.5	6	32	4	M6 x 20
WEX3-90	24	50	8	20	7	40	5	M8 x 22
WEX3-100	28	60	8	24	7	50	5	M10 x 22
WEX3-112	28	60	8	24	7	50	5	M10 x 22
WEX3-132	38	80	10	33	8	70	5	M12 x 28
WEX3-160	42	110	12	37	8	90	5	M12 x 28
WEX3-180	48	110	14	42.5	9	100	5	M16 x 36



Shaft dimensions

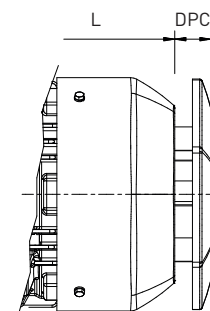
Drip proof canopy (impact canopy)

To find the overall length of a motor fitted with a drip proof canopy, please add dimension 'DPC' to dimension 'L'.

Note. All shaft down WEX3 motors must be fitted with a drip proof canopy.

Overall length + DPC

Type	L + DPC
WEX3-80	'L' + 25mm
WEX3-90	'L' + 29mm
WEX3-100	'L' + 35mm
WEX3-112	'L' + 35mm
WEX3-132	'L' + 46mm
WEX3-160	'L' + 58mm
WEX3-180	'L' + 58mm



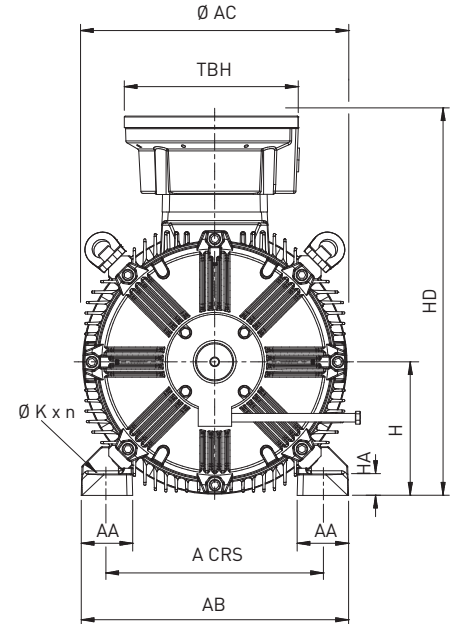
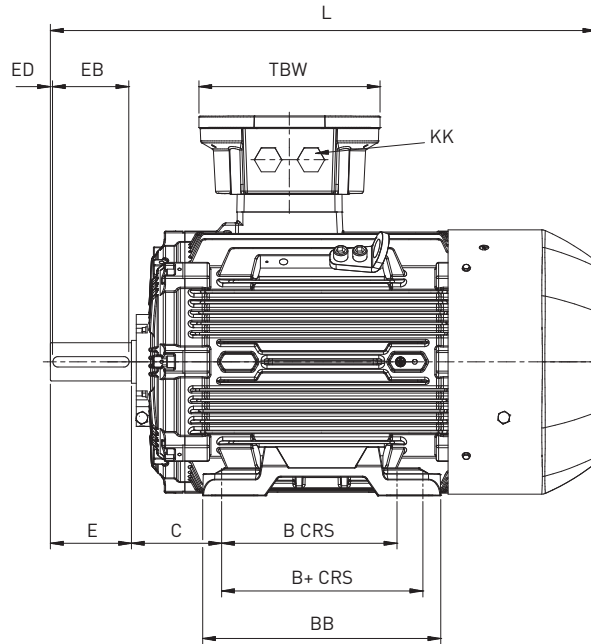
Dimensions - IEC specification

14

Foot and Flange mounting
Frame sizes 200 to 315 cast iron

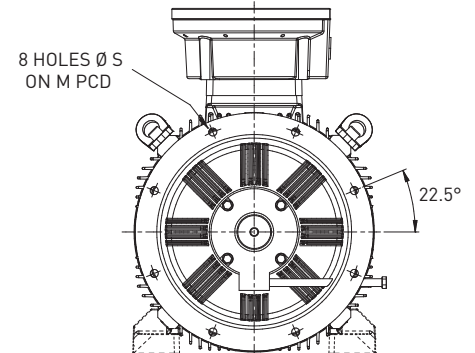
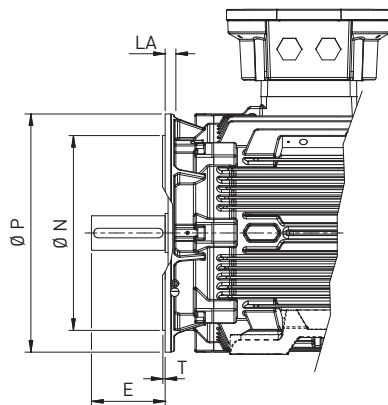
IM B3
IM 1001

Mounting options

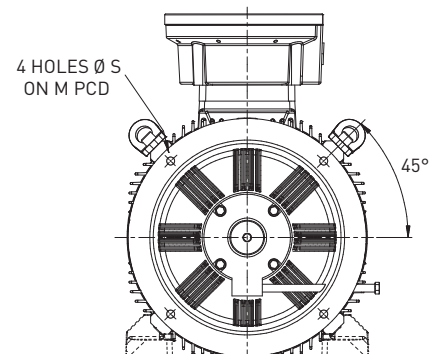


IM B5 / IM B35
IM 3001 / IM 2001

Mounting options



8 holes at 22.5° for flanges to suit
225 frames and above to IEC specification



4 holes at 45° on the flange to suit
200 frame IEC specification

Dimensions - IEC specification

Foot, and Flange mounting
Frame sizes 200 to 315 cast iron

15

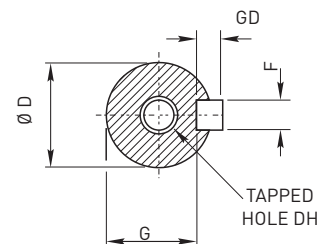
General Dimensions - WEX3

Type	A	B	B+	C	H	K x n	4 Pole +	2 Pole	AA	AB	Ø AC	BB	HA	HD	Exdb terminal box		
							L	L							TBW	TBH	KK
WEX3-200L	318	305	-	133	200	18.5 x 4	832	832	70	390	396	365	30	605	265	270	1 x CM40 & 1 x CM20
WEX3-225S	356	286	-	149	225	18.5 x 4	925	-	82	450	445	370	35	690	380	380	1 x CM40 & 1 x CM20
WEX3-225M	356	311	-	149	225	18.5 x 4	965	935	82	450	445	370	35	690	380	380	1 x CM40 & 1 x CM20
WEX3-250M	406	349	-	168	250	24 x 4	968	968	85	510	496	420	35	750	380	380	1 x CM40 & 1 x CM20
WEX3-280S	457	368	-	190	280	24 x 4	1035	1035	100	570	555	500	40	810	380	380	1 x CM50 & 1 x CM20
WEX3-280M	457	419	-	190	280	24 x 4	1085	1085	100	570	555	500	40	810	380	380	1 x CM50 & 1 x CM20
WEX3-315S	508	406	457	216	315	28 x 6	1260	1230	146	636	627	614	40	1018	380	380	1 x CM63 & 1 x CM20
WEX3-315M	508	457	406	216	315	28 x 6	1260	1230	146	636	627	614	40	1018	380	380	1 x CM63 & 1 x CM20
WEX3-315L	508	508	-	216	315	28 x 4	1440	1410	146	636	627	614	40	1018	492	484	1 x CM63 & 1 x CM20
WEX3-315L1	508	508	457	216	315	28 x 6	1320	1290	146	636	627	614	40	1018	492	484	1 x CM63 & 1 x CM20
WEX3-315L2	508	508	-	216	315	28 x 4	1440	1410	146	636	627	614	40	1018	492	484	1 x CM63 & 1 x CM20

n - number of foot fixing holes. B indicates standard foot fixing holes centres for frame, B+ indicates additional foot fixing holes centres.
TBW & TBH - show dimensions for Ex db box type, for Exdb eb see page 17

Flange

Type	IM B5 flange mounting					
	M	N	P	S	T	LA
WEX3-200	350	300	400	19	5	17
WEX3-225	400	350	450	19	5	22
WEX3-250	500	450	550	19	5	22
WEX3-280	500	450	550	19	5	22
WEX3-315	600	550	660	24	6	22



Shaft dimensions

Shaft

Type	4 pole +								2 pole							
	Ø D	E	F	G	GD	EB	ED	DH	Ø D	E	F	G	GD	EB	ED	DH
WEX3-200	55	110	16	49	10	100	5	M20 x 42	55	110	16	49	10	100	5	M20 x 42
WEX3-225	60	140	18	53	11	125	10	M20 x 42	55	110	16	49	10	100	5	M20 x 42
WEX3-250	65	140	18	58	11	125	10	M20 x 42	60	140	18	53	11	125	10	M20 x 42
WEX3-280	75	140	20	67.5	12	125	10	M20 x 42	65	140	18	58	11	125	10	M20 x 42
WEX3-315	80	170	22	71	14	160	5	M20 x 42	65	140	18	58	11	125	10	M20 x 42

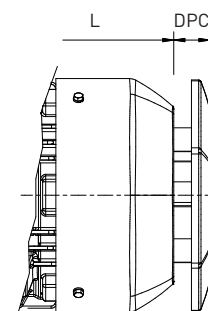
Drip proof canopy (impact canopy)

To find the overall length of a motor fitted with a drip proof canopy, please add dimension 'DPC' to dimension 'L'.

Note. All shaft down WEX3 motors must be fitted with a drip proof canopy.

Overall length + DPC

Type	L + DPC
WEX3-200	'L' + 78mm
WEX3-225	'L' + 56mm
WEX3-250	'L' + 85mm
WEX3-280	'L' + 113mm
WEX3-315	'L' + 87mm



Technical information

Mechanical: bearings, relubrication & oilseals

Permissible radial load

Bearings and greasing arrangements

Bearings are pre-packed with a grease type dependant on frame size and re-greasing facility as detailed in table opposite:

Standard and re-greasing facilities

Type	Standard grease	Regreasing facility
80-132	EA6 Polyurea	-
160-180	EA6 Polyurea	Available
200-315	Esso Unirex N3	Standard

WEX3 - Bearing references and oil seals					
Type	Poles	Bearings		Oil seals ⁽¹⁾	
		Drive end	Non drive end	Drive end	Non drive end
WEX3-80	All	6204ZZ C3	6204ZZ C3	20 x 35 x 7 ⁽²⁾	20 x 35 x 7 ⁽²⁾
WEX3-90	All	6205ZZ C3	6203ZZ C3	24 x 40 x 7 ⁽²⁾	17 x 26 x 7 ⁽²⁾
WEX3-100	All	6206ZZ C3	6205ZZ C3	30 x 42 x 7 ⁽²⁾	25 x 40 x 7 ⁽²⁾
WEX3-112	All	6206ZZ C3	6206ZZ C3	30 x 42 x 7 ⁽²⁾	30 x 42 x 7 ⁽²⁾
WEX3-132	All	6208ZZ C3	6305ZZ C3	40 x 55 x 8 ⁽²⁾	25 x 40 x 7 ⁽²⁾
WEX3-160	All	6309ZZ C3	6307ZZ C3	45 x 62 x 8 ⁽²⁾	35 x 47 x 7 ⁽²⁾
WEX3-180	All	6310ZZ C3	6308ZZ C3	50 x 70 x 8 ⁽²⁾	40 x 55 x 8 ⁽²⁾
WEX3-200	2	6312 C3	6212 C3	60 x 75 x 8 ⁽³⁾	60 x 75 x 8 ⁽³⁾
	4	6312 C3	6212 C3	60 x 75 x 8 ⁽³⁾	60 x 75 x 8 ⁽³⁾
	6	6312 C3	6212 C3	60 x 75 x 8 ⁽³⁾	60 x 75 x 8 ⁽³⁾
	8	6312 C3	6212 C3	60 x 75 x 8 ⁽³⁾	60 x 75 x 8 ⁽³⁾
WEX3-225	2	6312 C3	6312 C3	60 x 80 x 8 ⁽³⁾	60 x 80 x 8 ⁽³⁾
	4	6313 C3	6312 C3	65 x 80 x 8 ⁽³⁾	60 x 80 x 8 ⁽³⁾
	6	6313 C3	6312 C3	65 x 80 x 8 ⁽³⁾	60 x 80 x 8 ⁽³⁾
	8	6313 C3	6312 C3	65 x 80 x 8 ⁽³⁾	60 x 80 x 8 ⁽³⁾
WEX3-250	2	6313 C3	6313 C3	65 x 80 x 8 ⁽³⁾	65 x 80 x 8 ⁽³⁾
	4	6314 C3	6313 C3	70 x 90 x 10 ⁽³⁾	65 x 80 x 8 ⁽³⁾
	6	6314 C3	6313 C3	70 x 90 x 10 ⁽³⁾	65 x 80 x 8 ⁽³⁾
	8	6314 C3	6313 C3	70 x 90 x 10 ⁽³⁾	65 x 80 x 8 ⁽³⁾
WEX3-280	2	6314 C3	6314 C3	70 x 90 x 10 ⁽³⁾	70 x 90 x 10 ⁽³⁾
	4	6317 C3	6314 C3	85 x 110 x 12 ⁽³⁾	70 x 90 x 10 ⁽³⁾
	6	6317 C3	6314 C3	85 x 110 x 12 ⁽³⁾	70 x 90 x 10 ⁽³⁾
	8	6317 C3	6314 C3	85 x 110 x 12 ⁽³⁾	70 x 90 x 10 ⁽³⁾
WEX3-315	2	6316 C3	6316 C3	80 x 100 x 10 ⁽³⁾	80 x 100 x 10 ⁽³⁾
	4	6319 C3	6319 C3	95 x 120 x 12 ⁽³⁾	95 x 120 x 12 ⁽³⁾
	6	6319 C3	6319 C3	95 x 120 x 12 ⁽³⁾	95 x 120 x 12 ⁽³⁾
	8	6319 C3	6319 C3	95 x 120 x 12 ⁽³⁾	95 x 120 x 12 ⁽³⁾

⁽¹⁾ Sizes given are in mm, and represent bore x outside diameter x width

⁽²⁾ Material: Nitrile ⁽³⁾ Material: Silicone

Grease intervals quoted are for 70°C at the outer race, for every 15° above this intervals should be halved.

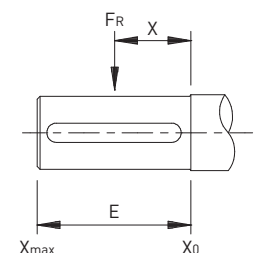
Regreasing intervals for vertical mount motors should be multiplied by a factor 0.65.

Permissible radial force at the shaft end

Dimension X (mm) is the distance from the shaft shoulder to the radial force F_R acting on the shaft.
X = Max is at the end of the shaft extension (dimension E).

Maximum radial force F_R (N)								
Type	2 Pole		4 Pole		6 Pole		8 Pole	
	X = 0	X = max	X = 0	X = max	X = 0	X = max	X = 0	X = max
WEX3-80	720	600	760	630	860	720	980	820
WEX3-90	780	650	810	670	940	780	1060	880
WEX3-100	1100	900	1110	910	1310	1070	1480	1210
WEX3-112	1090	900	1080	890	1290	1060	1460	1200
WEX3-132	1730	1360	1740	1400	2000	1610	2330	1880
WEX3-160	2950	2330	3050	2410	3420	2700	3870	3060
WEX3-180	3420	2740	3460	2820	4080	3320	4430	3610
WEX3-200	4390	3640	4500	3730	5270	4370	5790	4800
WEX3-225	4340	3620	5050	4030	5870	4690	6470	5170
WEX3-250	4910	4000	5710	4650	6520	5310	7180	5840
WEX3-280	5380	4500	6870	5750	8090	6770	9120	7630
WEX3-315	6400	5550	7500	6310	8420	7080	9120	7670

For dimension 'E' see the relevant dimension page

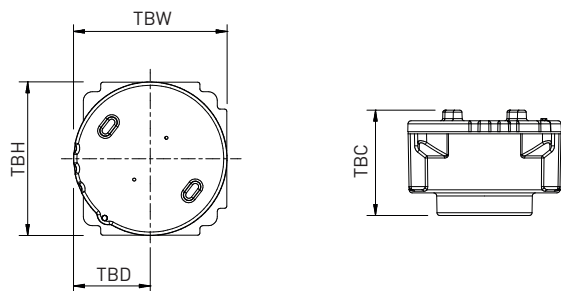


Mechanical: Terminal box

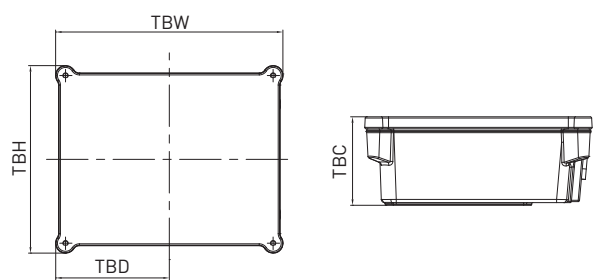
Terminal boxes

The terminal box dimensions on the dimension pages show the Exdb flameproof terminal box..
The dimension table below shows the Exdb flameproof and the Exdb de increased safety terminal box dimensions.

Ex db flameproof terminal box



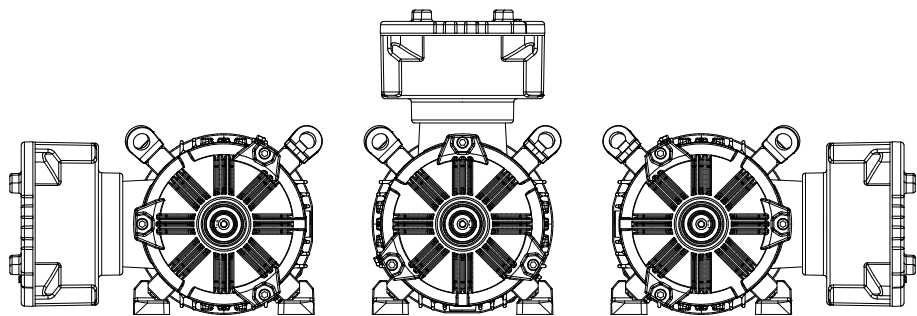
Ex db eb increased safety terminal box



Terminal box dimensions												
Type	Exdb flameproof terminal box						Exdb eb increased safety terminal box					
	TBW	TBH	TBC	TBD	HD	Terminal pin size	TBW	TBH	TBC	TBD	HD	Terminal pin size
WEX3-80	145	145	92	53	260	M5	145	145	88	53	255	M5
WEX3-90	145	145	92	53	280	M5	145	145	88	53	275	M5
WEX3-100	145	145	92	53	310	M5	145	145	88	53	303	M5
WEX3-112	145	145	92	53	329	M5	145	145	88	53	323	M5
WEX3-132	220	220	103	110	395	M6	220	220	117	110	392	M6
WEX3-160	220	220	103	110	455	M6	220	220	117	110	450	M6
WEX3-180	270	265	162	133	555	M8	340	280	152	140	542	M8
WEX3-200	270	265	162	133	595	M8	340	280	152	140	582	M8
WEX3-225	380	380	202	190	680	M8	340	280	152	140	627	M8
WEX3-250	380	380	202	190	740	M12	422	340	206	161	732	M12
WEX3-280	380	380	202	190	800	M12	422	340	206	161	792	M12
WEX3-315	492	293	371	242	1008	M12	422	340	206	161	915	M12

HD is base of motor to the top of the terminal box, see dimension pages.

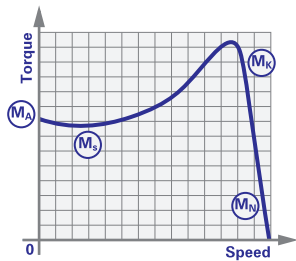
Flexi-mount: terminal box position



Flexi-mount

On motor frame sizes 80 to 280 the terminal box can be positioned at 12 o'clock, 3 o'clock or 9 o'clock, this can be achieved by moving the feet.
The 315 frame has removable feet, but cannot be repositioned.
The cable entry position on the -terminal box can also be rotated in 90° steps.

Typical speed / torque curve



(M_A) - Starting torque or locked rotor torque
 (M_S) - Pull up torque or run up torque
 (M_K) - Pull out torque or breakdown torque
 (M_N) - Full load torque

Notes

During the run up period in Star, there must be an adequate excess of motor torque over the load torque. The change to Delta must not occur until the motor is near the operating speed.

Refer to Brook Crompton for running up against a load in excess of 70% full load during Star Delta starting.

Motors are wound for either 230 / 400 volts or 400 / 690 volts

Performance figures are subject to EN tolerances.

Performance figures are based on a 400 volt winding.

Performance data within this catalogue, is from motor testing in accordance with EN 60034-2-1: 2007.

J Rotor Inertia

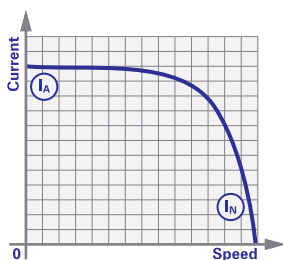
$$J \text{ (WK}^2 \text{ or WR}^2\text{)} = \frac{GD^2}{4}$$

$$J \text{ in lb ft}^2 : \frac{\text{kgm}^2}{0.042}$$

Noise levels

Noise levels shown on the performance pages are for a 50Hz supply only.

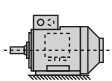
Typical speed / current curve



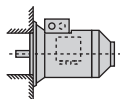
(I_A) - Starting current
 (I_N) - Full load current

Mounting options

Horizontal shaft:



IM B3
IM 1001
foot mounted



IM B5
IM 3001
flange at DE
no feet



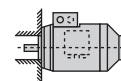
IM B6
IM 1051
foot wall mounted with
feet on left-hand side
when viewed from DE



IM B7
IM 1061
foot wall mounted with
feet on right-hand side
when viewed from DE

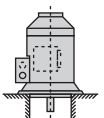


IM B8
IM 1071
ceiling mounted
with feet
above motor

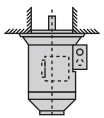


IM B14
IM 3601
face at DE
no feet

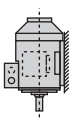
Vertical shaft:



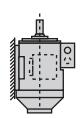
IM V1
IM 3011
flange at DE
shaft down
no feet



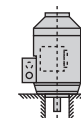
IM V3
IM 3031
flange at DE
shaft up
no feet



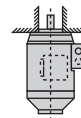
IM V5
IM 1011
vertical foot
wall mounted
shaft down



IM V6
IM 1031
vertical foot
wall mounted
shaft up



IM V18
IM 3611
face at DE
shaft down
no feet



IM V19
IM 3631
face at DE
shaft up
no feet

Combinations of the above are possible. e.g. B3/B5 or B35 (IM2001), B3/B14 or B34 (IM2101).

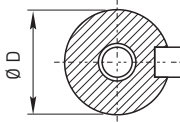
Dimension page notes

Shaft and Flange & Face spigot tolerances

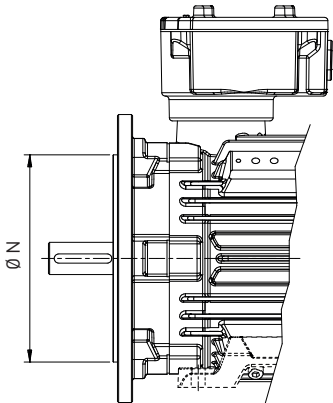
All dimensions shown are in millimetres

Dimensions should not be used for installation purposes unless specially endorsed

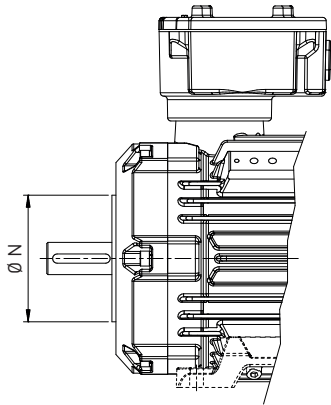
Shaft		
Dim Ø D	Tol.	Limits
11 to 14	j6	+0.008 -0.003
19 to 28	j6	+0.009 -0.004
38 to 48	k6	+0.018 +0.002
55 to 80	k6	+0.030 +0.011
85 to 110	k6	+0.035 +0.013



D Flange		
Dim Ø N	Tol.	Limits
110	j6	+0.013 -0.009
130 to 180	j6	+0.014 -0.011
230 to 250	j6	+0.016 -0.013
300	h6	+0.000 -0.032
350	h6	+0.000 -0.036
450	h6	+0.000 -0.040
550	h6	+0.000 -0.044



C Face		
Dim Ø N	Tol.	Limits
80	j6	+0.012 -0.007
95 & 110	j6	+0.013 -0.009



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