

# SIMOTICS XP 1LA Explosion-Proof Motors

## Motors for Zone 2 or 21/22 in type of protection Ex n or Ex tD

Self-ventilated motors NEMA Energy Efficient MG1 Table 12-11  
Aluminum series 1LA9 with order code D42 and explosion protection

### Selection and ordering data (continued)

Operating values at 60 Hz rated output														Aluminum series		m <sub>IM B3</sub> J		Torque class	
P <sub>rated</sub> , 50 Hz	P <sub>rated</sub> , 60 Hz	Frame size	n <sub>rated</sub> , 60 Hz	T <sub>rated</sub> , 60 Hz	EISA CC No. CC032A	η <sub>rated</sub> , 60 Hz, 4/4	η <sub>rated</sub> , 60 Hz, 3/4	η <sub>rated</sub> , 60 Hz, 2/4	COS-φ <sub>rated</sub> , 4/4	I <sub>rated</sub> , 60 Hz, 460 V	T <sub>LR</sub> /I <sub>rated</sub>	I <sub>LR</sub> /I <sub>rated</sub>	T <sub>B</sub> /I <sub>rated</sub>	L <sub>pA</sub> , 60 Hz	L <sub>WA</sub> , 60 Hz	1LA9 – NEMA Energy Efficient version for Zone 2 or 21/22 in type of protection Ex n or Ex tD	kg	kgm <sup>2</sup>	CL
kW	hp	FS	rpm	Nm		%	%	%	A							Order No. with order code for Ex prot.			
<b>0.18</b>	<b>0.25</b>	<b>63 M</b>	3460	0.5	–	69.5	69.5	65.5	0.78	0.42	2.8	4.9	3.3	53	64	<b>1LA9060-2KA</b> ■■■-Z D42+	4.0	0.00022	16
<b>0.25</b>	<b>0.33</b>	<b>63 M</b>	3460	0.69	–	71.0	71.0	67.0	0.76	0.58	2.5	5.0	2.7	53	64	<b>1LA9063-2KA</b> ■■■-Z D42+	4.7	0.00026	16
<b>0.37</b>	<b>0.5</b>	<b>71 M</b>	3445	1.0	–	71.0	71.0	67.0	0.75	0.87	3.3	7.5	3.4	56	67	<b>1LA9070-2KA</b> ■■■-Z D42+	6.0	0.00041	16
<b>0.56</b>	<b>0.75</b>	<b>71 M</b>	3445	1.6	–	72.0	72.0	68.0	0.73	1.34	3.6	7.2	3.7	56	67	<b>1LA9073-2KA</b> ■■■-Z D42+	7.2	0.00050	16
<b>0.75</b>	<b>1</b>	<b>80 M</b>	3485	2.1	–	75.5	75.5	72.5	0.82	1.52	4.4	9.6	4.4	60	71	<b>1LA9080-2KA</b> ■■■-Z D42+	10.7	0.0010	16
<b>1.1</b>	<b>1.5</b>	<b>80 M</b>	3480	3.0	–	82.5	82.5	81.5	0.89	1.88	3.8	8.6	3.2	60	71	<b>1LA9083-2KA</b> ■■■-Z D42+	12.4	0.0013	16
<b>1.5</b>	<b>2</b>	<b>90 S</b>	3510	4.1	✓	84.0	84.0	83.0	0.87	2.6	4.1	8.6	4.1	64	76	<b>1LA9090-2KA</b> ■■■-Z D42+	16.2	0.0018	16
<b>2.2</b>	<b>3</b>	<b>90 L</b>	3500	6.0	✓	85.5	85.5	84.5	0.87	3.7	4.1	8.5	5.1	64	76	<b>1LA9096-2KA</b> ■■■-Z D42+	18.6	0.0022	16
<b>3</b>	<b>4</b>	<b>100 L</b>	3510	8.2	–	87.5	87.5	86.5	0.87	4.95	3.4	8.6	3.7	66	78	<b>1LA9106-2KA</b> ■■■-Z D42+	25	0.0044	16
<b>4</b>	<b>5</b>	<b>112 M</b>	3525	10	✓	88.5	88.5	87.5	0.88	6.0	2.8	9.2	4.0	67	79	<b>1LA9113-2KA</b> ■■■-Z D42+	36.7	0.0077	16
<b>5.5</b>	<b>7.5</b>	<b>132 S</b>	3540	15	✓	88.5	88.5	87.5	0.90	8.7	2.7	8.5	3.8	72	84	<b>1LA9130-2KA</b> ■■■-Z D42+	46.2	0.019	16
<b>7.5</b>	<b>10</b>	<b>132 S</b>	3540	20	✓	89.5	89.5	88.5	0.92	11.4	2.8	8.3	3.7	72	84	<b>1LA9131-2KA</b> ■■■-Z D42+	58.1	0.024	16
<b>11</b>	<b>15</b>	<b>160 M</b>	3555	30	✓	90.2	90.2	89.2	0.90	17	2.5	8.5	3.7	74	86	<b>1LA9163-2KA</b> ■■■-Z D42+	78.6	0.044	16
<b>15</b>	<b>20</b>	<b>160 M</b>	3555	40	✓	90.2	90.2	89.2	0.90	23	2.5	8.5	3.7	74	86	<b>1LA9164-2KA</b> ■■■-Z D42+	87.6	0.051	16
<b>18.5</b>	<b>25</b>	<b>160 L</b>	3550	50	✓	91.0	91.0	90.0	0.92	27.5	2.4	8.5	3.5	74	86	<b>1LA9166-2KA</b> ■■■-Z D42+	110.4	0.065	16
<b>22</b>	<b>30</b>	<b>180 M</b>	3545	59	✓	91.0	91.0	90.0	0.86	35.5	2.6	8.6	3.5	74	86	<b>1LA9183-2WA</b> ■■■-Z D42+	131	0.090	16
<b>30</b>	<b>40</b>	<b>200 L</b>	3555	81	✓	91.7	91.7	90.7	0.88	46.5	2.5	8.4	3.6	75	88	<b>1LA9206-2WA</b> ■■■-Z D42+	182	0.16	16
<b>37</b>	<b>50</b>	<b>200 L</b>	3555	99	✓	92.4	92.4	91.4	0.88	57	2.7	8.4	3.7	75	88	<b>1LA9207-2WA</b> ■■■-Z D42+	211	0.20	16

Voltages		No. of poles	Motor type	Version	Order code(s)			
50 Hz	230 VΔ/400 VY	60 Hz	460 VY	2	1LA9060 ... 207	Standard	1	–
50 Hz	400 VΔ/690 VY	60 Hz	460 VΔ	2	1LA9060 ... 207	Standard	6	–
50 Hz	500 VY			2	1LA9060 ... 207	Without additional charge	3	–
	500 VΔ			2	1LA9106 ... 207	Without additional charge	5	–
Further voltages		For additional charges, code numbers, order codes and descriptions, see supplements and special versions.				9	...	

Types of construction <sup>1)</sup>		No. of poles	Motor type	Version	Order code(s)		
With flange	IM B5 <sup>2)</sup>	2	1LA9060 ... 207	With additional charge	1	–	
	IM V3 <sup>2)</sup>	2	1LA9060 ... 166	With additional charge	1	–	
	IM V1 with protective cover <sup>2) 3)</sup>	2	1LA9183 ... 207	With additional charge	9	M1G	
		2	1LA9060 ... 207	With additional charge	4	–	
With standard flange	IM B14, IM V19	2	1LA9060 ... 166	With additional charge	2	–	
With special flange	IM B14, IM V19 <sup>2)</sup>	2	1LA9060 ... 166	With additional charge	3	–	
Further types of constr.		For additional charges, code numbers, order codes and descriptions, see supplements and special versions.				9	...

Design according to ATEX		No. of poles	Motor type	Version	Order code(s)
Zone 2	Mains-fed operation	2	1LA9060 ... 166	With add. charge	1LA9 ... -Z D42 + M72
	Converter-fed operation (FC)	2	1LA9060 ... 166	With add. charge	1LA9 ... -Z D42 + M73
VIK (includes Zone 2) <sup>4)</sup>	Mains-fed operation	2	1LA9060 ... 166	With add. charge	1LA9 ... -Z D42 + K30
	Converter-fed operation (FC)	2	1LA9060 ... 166	On request	–
Zone 21	Mains-fed operation	2	1LA9060 ... 207	With add. charge	1LA9 ... -Z D42 + M34
	Converter-fed operation (FC)	2	1LA9060 ... 207	With add. charge	1LA9 ... -Z D42 + M38
Zone 22	Mains-fed operation	2	1LA9060 ... 207	With add. charge	1LA9 ... -Z D42 + M35
	Converter-fed operation (FC)	2	1LA9060 ... 207	With add. charge	1LA9 ... -Z D42 + M39
Zone 2/22 (IP55)	Mains-fed operation	2	1LA9060 ... 207	With add. charge	1LA9 ... -Z D42 + M74
	Converter-fed operation (FC)	2	1LA9060 ... 207	With add. charge	1LA9 ... -Z D42 + M75

Special versions		Order code(s)
Options	For add. charges, order codes and descr., see suppl. and special versions.	1LA9 ... -Z D42 + . . . + . . . + . . . + . . .

1) Types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with MG1 Table 12-11.  
 2) The following applies for explosion-proof motors: In the case of the types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air flow.  
 3) The "Second shaft extension" option, order code K16 is not possible.  
 4) If the identification Ex nA II is required in addition to VIK on the rating plate, this must be ordered using order code C27. The VIK version is not possible in combination with Zone 21 and 22.

# SIMOTICS XP 1LA Explosion-Proof Motors

## Motors for Zone 2 or 21/22 in type of protection Ex n or Ex tD

Self-ventilated motors NEMA Energy Efficient MG1 Table 12-11  
Aluminum series 1LA9 with order code D42 and explosion protection

### Selection and ordering data (continued)

P <sub>rated</sub> 50 Hz	P <sub>rated</sub> 60 Hz	Frame size	Operating values at 60 Hz rated output										Aluminum series 1LA9 – NEMA Energy Efficient version for Zone 2 or 21/22 in type of protection Ex n or Ex tD	m <sub>IM B3</sub> J		Torque class		
			n <sub>rated</sub> ed, 60 Hz	T <sub>rated</sub> ed, 60 Hz	EISA CC No. CC032A	η <sub>rated</sub> 60 Hz, 4/4	η <sub>rated</sub> 60 Hz, 3/4	η <sub>rated</sub> 60 Hz, 2/4	COS- φ <sub>rated</sub> 60 Hz, 4/4	I <sub>rated</sub> 60 Hz, 460 V	T <sub>LR</sub> / I <sub>rated</sub>	I <sub>LR</sub> / I <sub>rated</sub>		T <sub>B</sub> / I <sub>rated</sub>	L <sub>pFA</sub> 60 Hz		L <sub>WA</sub> 60 Hz	Order No. with order code for Ex prot.
kW	hp	FS	rpm	Nm	%	%	%	A										

- Cooling: Self-ventilated (IC 411)
- Efficiency: NEMA Energy Efficient in accordance with NEMA MG1 Table 12-11 and service factor (SF) 1.15
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)

4-pole: 1800 rpm at 60 Hz																				
0.12	0.16	63 M	1710	0.67	–	68.0	67.5	64.0	0.60	0.37	2.7	3.9	2.8	46	57	1LA9060-4KA	■ ■ -Z D42+	4.0	0.00037	16
0.19	0.25	63 M	1705	1.1	–	64.0	63.0	59.0	0.63	0.59	3.0	3.6	3.1	46	57	1LA9063-4KA	■ ■ -Z D42+	4.7	0.00045	16
0.25	0.33	71 M	1730	1.4	–	68.5	68.5	64.5	0.60	0.76	3.6	4.9	3.4	48	59	1LA9070-4KA	■ ■ -Z D42+	6.0	0.00076	16
0.37	0.5	71 M	1725	2.0	–	69.0	69.0	65.0	0.68	0.99	3.3	4.9	3.4	48	59	1LA9073-4KA	■ ■ -Z D42+	7.0	0.0010	16
0.56	0.75	80 M	1725	3.1	–	74.3	74.3	71.3	0.71	1.33	3.4	6.8	3.6	51	62	1LA9080-4KA	■ ■ -Z D42+	10.7	0.0017	16
0.75	1	80 M	1720	4.2	–	82.5	82.5	81.5	0.72	1.58	4.0	7.3	3.9	51	62	1LA9083-4KA	■ ■ -Z D42+	12.4	0.0024	16
1.1	1.5	90 S	1755	6.0	✓	84.0	84.0	83.0	0.76	2.15	3.1	7.7	3.9	52	64	1LA9090-4KA	■ ■ -Z D42+	16.2	0.0033	16
1.5	2	90 L	1755	8.2	✓	84.0	84.0	83.0	0.76	2.95	3.6	8.1	4.2	52	64	1LA9096-4KA	■ ■ -Z D42+	18.6	0.0040	16
2.2	3	100 L	1750	12	–	87.5	87.5	86.5	0.79	4.0	3.4	8.4	4.3	57	69	1LA9106-4KA	■ ■ -Z D42+	26	0.0052	16
3	4	100 L	1750	16	–	87.5	87.5	86.5	0.79	5.4	3.8	8.7	4.6	57	69	1LA9107-4KA	■ ■ -Z D42+	31	0.0077	16
4	5	112 M	1755	20	✓	87.5	87.5	86.5	0.79	6.7	3.2	8.6	3.9	57	69	1LA9113-4KA	■ ■ -Z D42+	38.7	0.014	16
5.5	7.5	132 S	1760	30	✓	89.5	89.5	88.5	0.81	9.5	3.2	8.7	4.1	66	78	1LA9130-4KA	■ ■ -Z D42+	49.2	0.023	16
7.5	10	132 M	1760	41	✓	89.5	89.5	88.5	0.82	12.8	3.4	8.7	4.1	66	78	1LA9133-4KA	■ ■ -Z D42+	62.1	0.029	16
11	15	160 M	1765	60	✓	91.0	91.0	90.0	0.85	17.8	2.7	8.1	3.2	70	82	1LA9163-4KA	■ ■ -Z D42+	86.6	0.055	16
15	20	160 L	1765	81	✓	91.0	91.0	90.0	0.85	24.5	2.8	8.5	3.5	70	82	1LA9166-4KA	■ ■ -Z D42+	115.4	0.072	16
18.5	25	180 M	1770	100	✓	92.4	92.4	91.4	0.83	30.5	2.8	8.4	3.6	67	80	1LA9183-4WA	■ ■ -Z D42+	126	0.15	16
22	30	180 L	1775	118	✓	92.4	92.4	91.4	0.83	36	3.1	8.8	3.9	67	80	1LA9186-4WA	■ ■ -Z D42+	146	0.19	16
30	40	200 L	1770	162	✓	93.0	93.0	91.5	0.86	47	3.0	8.3	3.6	69	82	1LA9207-4WA	■ ■ -Z D42+	196	0.32	16

Voltages		No. of poles	Motor type	Version		Order code(s)		
50 Hz	230 VΔ/400 VY	60 Hz	460 VY	4	1LA9060 ... 207	Standard	1	–
50 Hz	400 VΔ/690 VY	60 Hz	460 VΔ	4	1LA9060 ... 207	Standard	6	–
50 Hz	500 VY			4	1LA9060 ... 207	Without additional charge	3	–
	500 VΔ			4	1LA9106 ... 207	Without additional charge	5	–
Further voltages		For additional charges, code numbers, order codes and descriptions, see supplements and special versions.					9	...

Types of construction <sup>1)</sup>		No. of poles	Motor type	Version		Order code(s)		
With flange	IM B5 <sup>2)</sup>	4	1LA9060 ... 207	With additional charge		1	–	
	IM V3 <sup>2)</sup>	4	1LA9060 ... 166	With additional charge		1	–	
		4	1LA9183 ... 207	With additional charge		9	M1G	
	IM V1 with prot. cover <sup>2) 3)</sup>	4	1LA9060 ... 207	With additional charge		4	–	
With standard flange	IM B14, IM V19 <sup>2)</sup>	4	1LA9060 ... 166	With additional charge		2	–	
With special flange	IM B14, IM V19 <sup>2)</sup>	4	1LA9060 ... 166	With additional charge		3	–	
Further types of constr.		For additional charges, code numbers, order codes and descriptions, see supplements and special versions.					9	...

Design according to ATEX		No. of poles	Motor type	Version		Order code(s)
Zone 2	Mains-fed operation	4	1LA9060 ... 166	With add. charge	1LA9 ... - ... ■ ■ -Z D42	+ M72
	Converter-fed operation (FC)	4	1LA9060 ... 166	With add. charge	1LA9 ... - ... ■ ■ -Z D42	+ M73
VIK (includes Zone 2) <sup>4)</sup>	Mains-fed operation	4	1LA9060 ... 166	With add. charge	1LA9 ... - ... ■ ■ -Z D42	+ K30
	Converter-fed operation (FC)	4	1LA9060 ... 166	On request		–
Zone 21	Mains-fed operation	4	1LA9060 ... 207	With add. charge	1LA9 ... - ... ■ ■ -Z D42	+ M34
	Converter-fed operation (FC)	4	1LA9060 ... 207	With add. charge	1LA9 ... - ... ■ ■ -Z D42	+ M38
Zone 22	Mains-fed operation	4	1LA9060 ... 207	With add. charge	1LA9 ... - ... ■ ■ -Z D42	+ M35
	Converter-fed operation (FC)	4	1LA9060 ... 207	With add. charge	1LA9 ... - ... ■ ■ -Z D42	+ M39
Zone 2/22 (IP55)	Mains-fed operation	4	1LA9060 ... 207	With add. charge	1LA9 ... - ... ■ ■ -Z D42	+ M74
	Converter-fed operation (FC)	4	1LA9060 ... 207	With add. charge	1LA9 ... - ... ■ ■ -Z D42	+ M75

Special versions		No. of poles	Motor type	Version		Order code(s)		
Options		For additional charges, order codes and descriptions, see supplements and special versions.					1LA9 ... - ... ■ ■ -Z D42	+ . . . + . . . + . . .

1) Types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with MG1 Table 12-11.

2) The following applies for explosion-proof motors: In the case of the types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air flow.

3) The "Second shaft extension" option, order code K16 is not possible.

4) If the identification Ex nA II is required in addition to VIK on the rating plate, this must be ordered using order code C27. The VIK version is not possible in combination with Zone 21 and 22.

# SIMOTICS XP 1LA Explosion-Proof Motors

## Motors for Zone 2 or 21/22 in type of protection Ex n or Ex tD

Self-ventilated motors NEMA Energy Efficient MG1 Table 12-11  
Aluminum series 1LA9 with order code D42 and explosion protection

### Selection and ordering data (continued)

Operating values at 60 Hz rated output														Aluminum series		$m_{IM\ B3}$ J	Torque class			
$P_{rated, 50\ Hz}$	$P_{rated, 60\ Hz}$	Frame size	$n_{rated, 60\ Hz}$	$T_{rated, 60\ Hz}$	EISA CC No. CC032A	$\eta_{rated, 60\ Hz, 4/4}$	$\eta_{rated, 60\ Hz, 3/4}$	$\eta_{rated, 60\ Hz, 2/4}$	$\cos\phi_{rated, 4/4}$	$I_{rated, 60\ Hz, 460\ V}$	$T_{LR}/T_{rated}$	$I_{LR}/I_{rated}$	$T_B/I_{rated}$	$L_{pfA, 60\ Hz}$	$L_{WA, 60\ Hz}$			1LA9 – NEMA Energy Efficient version for Zone 2 or 21/22 in type of protection Ex n or Ex tD	Order No. with order code for Ex prot.	kg
kW	hp	FS	rpm	Nm		%	%	%	A											

- Cooling: Self-ventilated (IC 411)
- Efficiency: NEMA Energy Efficient in accordance with NEMA MG1 Table 12-11 and service factor (SF) 1.15
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)

6-pole: 1200 rpm at 60 Hz																				
0.75	1	90 S	1140	6.3	✓	80.0	80.0	79.0	0.66	1.78	3.0	5.6	3.0	47	59	1LA9090-6KA	■ ■ -Z D42+	16.9	0.0033	16
1.1	1.5	90 L	1150	9.1	✓	85.5	85.5	84.5	0.64	2.5	3.7	6.4	3.7	47	59	1LA9096-6KA	■ ■ -Z D42+	19.6	0.0050	16
1.5	2	100 L	1150	12	–	86.5	86.5	85.5	0.70	3.1	3.5	7.2	3.8	51	63	1LA9106-6KA	■ ■ -Z D42+	26	0.0055	16
2.2	3	112 M	1160	18	✓	87.5	87.5	86.5	0.66	4.8	2.9	7.5	3.7	56	68	1LA9113-6KA	■ ■ -Z D42+	38.7	0.014	16
4	5	132 M	1160	30	✓	87.5	87.5	86.5	0.77	6.9	3.0	7.9	3.6	67	79	1LA9133-6KA	■ ■ -Z D42+	53.2	0.025	16
5.5	7.5	132 M	1160	45	✓	89.5	89.5	88.5	0.73	10.6	3.7	8.4	4.3	67	79	1LA9134-6KA	■ ■ -Z D42+	66.1	0.034	16
7.5	10	160 M	1165	61	✓	89.5	89.5	88.5	0.70	15	2.4	6.4	2.8	70	82	1LA9163-6KA	■ ■ -Z D42+	103.6	0.063	16
11	15	160 L	1165	90	✓	90.2	90.2	89.2	0.77	19.9	3.1	8.3	3.8	70	82	1LA9166-6KA	■ ■ -Z D42+	113.4	0.072	16
15	20	180 L	1175	122	✓	90.2	90.2	89.2	0.75	28	2.8	7.1	2.8	70	82	1LA9186-6WA	■ ■ -Z D42+	144	0.19	16
18.5	25	200 L	1175	150	✓	91.7	91.7	90.7	0.75	34	2.8	7.1	2.8	70	82	1LA9206-6WA	■ ■ -Z D42+	183	0.28	16
22	30	200 L	1175	179	✓	91.7	91.7	90.7	0.75	40	2.8	7.2	2.8	70	82	1LA9207-6WA	■ ■ -Z D42+	214	0.36	16

Voltages				No. of poles	Motor type	Version		Order code(s)
50 Hz	230 VΔ/400 VY	60 Hz	460 VY	6	1LA9090 ... 207	Standard	1	–
50 Hz	400 VΔ/690 VY	60 Hz	460 VΔ	6	1LA9090 ... 207	Standard	6	–
50 Hz	500 VY			6	1LA9090 ... 207	Without additional charge	3	–
	500 VΔ			6	1LA9106 ... 207	Without additional charge	5	–
Further voltages		For additional charges, code numbers, order codes and descriptions, see supplements and special versions.					9	...

Types of construction <sup>1)</sup>				No. of poles	Motor type	Version		Order code(s)
With flange		IM B5 <sup>2)</sup>		6	1LA9090 ... 207	With additional charge	1	–
		IM V3 <sup>2)</sup>		6	1LA9090 ... 166	With additional charge	1	–
				6	1LA9186 ... 207	With additional charge	9	M1G
With standard flange		IM V1 with protective cover <sup>2)3)</sup>		6	1LA9090 ... 207	With additional charge	4	–
		IM B14, IM V19 <sup>2)</sup>		6	1LA9090 ... 166	With additional charge	2	–
With special flange		IM B14, IM V19 <sup>2)</sup>		6	1LA9090 ... 166	With additional charge	3	–
Further types of constr.		For additional charges, code numbers, order codes and descriptions, see supplements and special versions.					9	...

Design according to ATEX				No. of poles	Motor type	Version		Order code(s)
Zone 2	Mains-fed operation			6	1LA9090 ... 166	With add. charge	1LA9 . . . . . ■ ■ -Z D42	+ M72
	Converter-fed operation (FC)			6	1LA9090 ... 166	With add. charge	1LA9 . . . . . ■ ■ -Z D42	+ M73
VIK (includes Zone 2) <sup>4)</sup>	Mains-fed operation			6	1LA9090 ... 166	With add. charge	1LA9 . . . . . ■ ■ -Z D42	+ K30
	Converter-fed operation (FC)			6	1LA9090 ... 166	On request		–
Zone 21	Mains-fed operation			6	1LA9090 ... 207	With add. charge	1LA9 . . . . . ■ ■ -Z D42	+ M34
	Converter-fed operation (FC)			6	1LA9090 ... 207	With add. charge	1LA9 . . . . . ■ ■ -Z D42	+ M38
Zone 22	Mains-fed operation			6	1LA9090 ... 207	With add. charge	1LA9 . . . . . ■ ■ -Z D42	+ M35
	Converter-fed operation (FC)			6	1LA9090 ... 207	With add. charge	1LA9 . . . . . ■ ■ -Z D42	+ M39
Zone 2/22 (IP55)	Mains-fed operation			6	1LA9090 ... 207	With add. charge	1LA9 . . . . . ■ ■ -Z D42	+ M74
	Converter-fed operation (FC)			6	1LA9090 ... 207	With add. charge	1LA9 . . . . . ■ ■ -Z D42	+ M75
Special versions								Order code(s)
Options		For additional charges, order codes and descriptions, see supplements and special versions.					1LA9 . . . . . ■ ■ -Z D42	+ . . . + . . . + . . .

1) Types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with MG1 Table 12-11.

2) The following applies for explosion-proof motors: In the case of the types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air flow.

3) The "Second shaft extension" option, order code K16 is not possible.

4) If the identification Ex nA II is required in addition to VIK on the rating plate, this must be ordered using order code C27. The VIK version is not possible in combination with Zone 21 and Z2.