

# SIMOTICS GP 1LE1 Standard Motors

## Pole-changing motors

Self-ventilated motors  
Aluminum series 1LE1011 for constant load torque

### Selection and ordering data

$P_{ra-}$ ted1, 50 Hz		$P_{ra-}$ ted2, 50 Hz	Frame size	Operating values at rated output for N1								Operating values at rated output for N2								Aluminum series <b>1LE1011</b> – One winding pole-changing for constant load torque Order No.	$m$	$J$	Torque class
$n_{ra-}$ ted1, 50 Hz	$T_{ra-}$ ted1, 50 Hz	$\eta_{ra-}$ ted1, 50 Hz, 4/4	$\cos \phi_{ra-}$ ted1, 50 Hz, 4/4	$I_{ra-}$ ted1, 50 Hz, 4/4	$T_{LR}/$ $T_{ra-}$ ted1	$I_{LR}/$ $I_{ra-}$ ted1	$T_B/$ $T_{ra-}$ ted1	$n_{ra-}$ ted2, 50 Hz	$T_{ra-}$ ted2, 50 Hz	$\eta_{ra-}$ ted2, 50 Hz, 4/4	$\cos \phi_{ra-}$ ted2, 50 Hz, 4/4	$I_{ra-}$ ted2, 50 Hz, 4/4	$T_{LR}/$ $T_{ra-}$ ted2	$I_{LR}/$ $I_{ra-}$ ted2	$T_B/$ $T_{ra-}$ ted2	IM B3							
kW	kW	FS	rpm	Nm	%	A		rpm	Nm	%	A					kg	kgm <sup>2</sup>	CL					
<ul style="list-style-type: none"> <li>Cooling: Self-ventilated (IC 411)</li> <li>Line operation: Double pole-changing for constant load torque</li> <li>Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)</li> </ul>																							
4/2-pole: 1500/3000 rpm at 50 Hz with one winding connected in Dahlander circuit																							
			1500 rpm				3000 rpm																
1.9	2.4	100 L	1390	13	72.0	0.87	4.40	1.7	4.1	1.8	2800	8.2	70.0	0.88	5.6	1.8	4.2	1.8	1LE1011-1AJ4	18	0.0059	13	
2.5	3.1	100 L	1400	17	76.3	0.87	5.4	1.9	5.2	2.8	2840	10.0	77.3	0.90	6.4	2.1	5.2	2.9	1LE1011-1AJ5	22	0.0078	13	
3.7	4.4	112 M	1420	25	79.4	0.86	7.8	1.8	4.9	2.3	2885	15.0	80.8	0.92	8.5	2.1	6.4	2.6	1LE1011-1BJ2	27	0.010	13	
4.7	5.9	132 S	1440	31	82.0	0.84	9.8	1.6	5.6	2.7	2875	20.0	80.0	0.89	12.0	1.8	5.6	2.8	1LE1011-1CJ0	38	0.019	13	
6.5	8.0	132 M	1435	43	82.0	0.86	13.3	1.7	5.4	2.6	2880	27.0	82.0	0.92	15.3	1.8	6.3	2.8	1LE1011-1CJ2	44	0.024	13	
9.3	11.5	160 M	1440	62	84.5	0.87	18.3	1.7	5.7	2.8	2870	38.0	82.0	0.92	22.0	1.8	6.0	2.9	1LE1011-1DJ2	62	0.044	13	
13.0	16	160 L	1450	86	87.0	0.85	25.5	1.6	6.0	2.3	2920	52.0	86.0	0.94	28.5	1.9	7.1	2.8	1LE1011-1DJ6	85	0.068	13	
8/4-pole: 750/1500 rpm at 50 Hz with one winding connected in Dahlander circuit																							
			750 rpm				1500 rpm																
0.55	1.1	100 L	715	7.3	57.0	0.53	2.65	2.0	3.0	2.7	1425	7.4	77.7	0.87	2.35	1.7	4.6	2.1	1LE1011-1AL4	18	0.0059	10	
0.9	1.5	100 L	700	12	64.2	0.64	3.15	1.5	2.9	2.0	1415	10.0	77.7	0.89	3.15	1.5	4.5	1.9	1LE1011-1AL5	22	0.0078	10	
1.1	1.9	112 M	715	15	66.5	0.60	4.00	1.6	3.2	2.3	1440	13.0	80.9	0.87	3.90	1.6	5.4	2.3	1LE1011-1BL2	27	0.010	10	
1.6	3.2	132 S	730	21	61.5	0.53	7.1	1.6	3.3	2.6	1450	21.0	82.3	0.87	6.5	1.4	5.0	2.1	1LE1011-1CL0	38	0.019	10	
2.2	4.4	132 M	730	29	68.0	0.52	9.0	2.0	3.8	3.0	1450	29.0	84.5	0.88	8.5	1.5	5.5	2.3	1LE1011-1CL2	44	0.024	10	
3.5	7	160 M	730	46	77.5	0.57	11.4	2.0	4.2	2.8	1450	46.0	84.0	0.90	13.4	1.6	5.2	2.2	1LE1011-1DL2	62	0.044	10	
5.6	11	160 L	725	74	80.2	0.60	16.8	1.9	4.0	2.7	1445	73.0	84.4	0.90	21.0	1.5	5.1	2.2	1LE1011-1DL4	73	0.056	10	
<b>Voltagess</b>					No. of poles		Frame size		Motor type		Version								Order code(s)				
50 Hz 230 V					4/2, 8/4		100 L ... 160 L		1LE1011-1A ... -1D		Standard		2 2						–				
50 Hz 400 V					4/2, 8/4		100 L ... 160 L		1LE1011-1A ... -1D		Standard		3 4						–				
50 Hz 500 V					4/2, 8/4		100 L ... 160 L		1LE1011-1A ... -1D		Without additional charge		4 0						–				
50 Hz 690 V					4/2, 8/4		100 L ... 160 L		1LE1011-1A ... -1D		Without additional charge		4 7						–				
Further voltages <sup>1)</sup>													9 0						...				
<b>Types of construction</b>					No. of poles		Frame size		Motor type		Version								Order code(s)				
Without flange			IM B3 <sup>2)</sup>		4/2, 8/4		100 L ... 160 L		1LE1011-1A ... -1D		Standard		A						–				
With flange			IM B5 <sup>2)</sup>		4/2, 8/4		100 L ... 160 L		1LE1011-1A ... -1D		With additional charge		F						–				
With standard flange			IM B14 <sup>2)</sup>		4/2, 8/4		100 L ... 160 L		1LE1011-1A ... -1D		With additional charge		K						–				
Further types of construction													■						...				
<b>Motor protection</b>					No. of poles		Frame size		Motor type		Version								Order code(s)				
Without					4/2, 8/4		100 L ... 160 L		1LE1011-1A ... -1D		Standard		A						–				
PTC thermistor with 3 temperature sensors					4/2, 8/4		100 L ... 160 L		1LE1011-1A ... -1D		With additional charge		B						–				
Further motor protection													■						...				
<b>Connection box position</b>					No. of poles		Frame size		Motor type		Version								Order code(s)				
Connection box at top					4/2, 8/4		100 L ... 160 L		1LE1011-1A ... -1D		Standard		4						–				
Further connection box positions																			For additional charges, code numbers and descriptions, see supplements and special versions				
<b>Special versions</b>																			Order code(s)				
Options																			1LE1011-... ■-■■■■■-Z ...+...+...+...				

<sup>1)</sup> Operating values at rated output for 60 Hz are available on request.  
<sup>2)</sup> Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (H03) and stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. When ordering with condensation drainage holes (H03), the type must be specified.