

Three-phase motors with squirrel-cage rotor, Premium Efficiency IE3

with surface cooling, duty type S1, continuous duty
for rated voltage, thermal class 155 (F), degree of protection IP 55, 50/60 Hz

Motor selection data															Design point 400 V, 50 Hz 460 V, 60 Hz	
Type	U _B	f _B	P _B	M _B	n _B	η _B			cosφ _B	I _B	I _K /I _B	M _K /M _B	M _S /M _B	M _R /M _B	J	m
IEC/EN 60034-2-1																
400 V																
	V	Hz	kW	Nm	rpm	100 %	75 %	50 %	-	A	-	-	-	-	kgm ²	kg
Synchronous speed 3000 rpm/3600 rpm – 2-pole version																
IE3-W41R 56 G2	400	50	0.12	0.4	2830	IE3- 60.8	59.4	55.9	0.77	0.32	4.5	2.1	2.1	2.3	0.00013	4.5
	460	60	0.14	0.39	3410	IE3- 71.4	62	66.5	0.82	0.3	5.2	2	2	2.3		
IE3-W42R 63 K2	400	50	0.18	0.62	2790	IE3- 65.9	63.1	58.8	0.76	0.51	4.1	1.9	1.9	2.2	0.00013	4.9
	460	60	0.21	0.59	3400	IE3- 65.9	63.1	58.8	0.76	0.51	4.7	2.4	2.4	2.7		
IE3-W41R 63 G2	400	50	0.25	0.85	2825	IE3- 69.7	70.1	67.1	0.83	0.58	4.9	2.4	2.2	2.7	0.00025	6.3
	460	60	0.3	0.84	3410	IE3- 69.5	70	67.8	0.84	0.58	5.3	2.3	2.2	2.8		
IE3-W42R 71 K2	400	50	0.37	1.24	2840	IE3- 73.8	74.1	71.7	0.82	0.83	5.8	2.8	2.7	3.2	0.00032	7.6
	460	60	0.44	1.23	3430	IE3- 73.4	73.6	71.3	0.84	0.83	6.2	2.9	2.8	3.4		
IE3-W41R 71 GY2	400	50	0.55	1.83	2870	IE3- 77.8	77.5	74.4	0.79	1.23	6.3	2.9	2.9	3.5	0.00057	10
	460	60	0.65	1.79	3460	IE3- 77.0	76.7	73.9	0.81	1.2	6.9	2.9	2.9	3.6		
IE3-W42R 80 K2	400	50	0.75	2.5	2870	IE3- 80.7	80.7	78.2	0.81	1.65	6.4	2.6	2.6	3.5	0.00072	11.5
	460	60	0.9	2.48	3460	IE3- 77.0	76.9	74.7	0.83	1.65	6.9	2.7	2.7	3.6		
IE3-W41R 80 GY2	400	50	1.1	3.66	2870	IE3- 82.7	83.8	82.6	0.86	2.22	7.0	2.8	2.7	3.4	0.00132	15
	460	60	1.3	3.58	3465	IE3- 85.5	85.9	84.6	0.86	2.25	7.3	2.7	2.5	3.5		
IE3-W42R 90 S2	400	50	1.5	4.94	2900	IE3- 84.2	85.4	83.2	0.81	3.12	7.9	3.5	3.5	4.4	0.0017	19
	460	60	1.8	4.93	3490	IE3- 85.5	85.5	83.5	0.83	3.15	8.4	3.3	3.3	4.2		
IE3-W41R 90 LY2	400	50	2.2	7.3	2880	IE3- 85.9	85.7	83.9	0.88	4.25	8.0	2.5	2.3	2.9	0.00275	23.5
	460	60	2.6	7.16	3470	IE3- 86.5	87.2	88.1	0.88	4.3	7.2	2.1	1.8	2.7		
IE3-W41R 100 LY2	400	50	3	9.81	2920	IE3- 87.1	88	86.3	0.82	6	7.7	2.3	2.2	3.5	0.0045	31
	460	60	3.6	9.79	3510	IE3- 88.5	88.8	87.3	0.85	6	6.9	1.9	1.5	3		
IE3-W41R 112 MY2	400	50	4	13.1	2920	IE3- 88.1	87.5	86.9	0.84	7.9	8.3	2.3	2.1	3.3	0.0055	38
	460	60	4.8	13.06	3510	IE3- 89.5	89.9	89.2	0.86	7.8	7.1	1.6	1.4	2.7		
IE3-W41R 132 S2T	400	50	5.5	18	2925	IE3- 89.2	89.4	87.7	0.80	11.1	8.3	2.6	2.5	3.8	0.0068	48
	460	60	6.6	17.91	3520	IE3- 90.2	90.2	88.8	0.83	11.1	7.6	1.9	1.7	3.3		
IE3-W41R 132 SX2	400	50	7.5	24.0	2925	IE3- 90.1	89.4	87.9	0.87	14.0	8.0	2.5	2.1	3.3	0.0168	75
	460	60	9	24	3520	IE3- 90.5	89.5	87.8	0.89	14	7.1	2.3	1.9	3.1		
IE3-W41R 160 M2	400	50	11	36.0	2950	IE3- 91.4	91.7	90.5	0.90	19.5	8.0	2.2	1.8	3.2	0.0575	125
	460	60	13.2	36	3540	IE3- 91	90	87.9	0.91	20	7.3	2	1.6	2		
IE3-W41R 160 MX2	400	50	15	49.0	2950	IE3- 91.9	92.0	91.3	0.91	26.0	7.9	2.2	1.7	3.1	0.0675	145
	460	60	18	48	3545	IE3- 92	92.3	91.2	0.92	26.5	7.4	2	1.6	2.9		
IE3-W41R 160 L2	400	50	18.5	60.0	2960	IE3- 92.4	92.5	91.4	0.90	32.0	9.2	2.6	2.1	3.6	0.078	160
	460	60	22	59	3550	IE3- 92	91.9	90.7	0.91	33	8.5	2.4	1.9	3.3		
IE3-W41R 180 M2C	400	50	22	71	2975	IE3- 92.7	92.6	91.5	0.91	37.5	8.9	1.9	1.4	3.3	0.1717	214
	460	60	26	70	3570	IE3- 92.4	92.0	90.7	0.92	38.5	8.2	1.8	1.3	3.0		
IE3-W41R 200 L2	400	50	30	97	2965	IE3- 93.3	92.2	90.6	0.88	52.5	8.6	2.1	1.6	3.3	0.36	305
	460	60	33	88	3565	IE3- 92.4	91.0	88.6	0.88	51.0	8.5	2.1	1.6	3.2		
IE3-W41R 200 LX2C	400	50	37	119	2980	IE3- 93.7	92.9	91.7	0.89	64.0	8.7	1.7	1.3	3.2	0.4757	310
	460	60	40	107	3575	IE3- 93	91.7	89.5	0.89	60.5	8.8	1.8	1.3	3.2		
IE3-W41R 225 M2	400	50	45	145	2960	IE3- 94.0	93.7	93.0	0.89	77.5	8.8	2.3	1.9	3.2	0.375	375
	460	60	54	145	3553	IE3- 93.6	93.3	92.6	0.89	81.5	8.1	2.1	1.7	2.9		
IE3-W41R 250 M2	400	50	55	177	2970	IE3- 94.6	94.4	93.6	0.91	92	8.9	2.2	1.9	3.2	0.65	510
	460	60	66	177	3568	IE3- 94.1	93.5	92.3	0.92	95.5	8.2	2	1.8	2.9		
IE3-W41R 280 S2	400	50	75	241	2967	IE3- 94.7	94.5	93.9	0.89	128	8.1	1.9	1.9	2.8	0.65	500
	460	60	82	220	3566	IE3- 94.5	94	92.5	0.90	121	8.1	2	1.8	3		
IE3-W41R 280 M2	400	50	90	289	2970	IE3- 95	94.5	94	0.90	152	8.4	2.2		3.1	0.675	545
	460	60	90						upon request							
IE3-W41R 315 S2	400	50	110	354	2970	IE3- 95.2	94.5	93.5	0.89	187	10.0	1.9	1.7	3.0	1.21	750
	460	60	110	294	3570	IE3- 95.0	94.0	92.5	0.89	163	10	2	1.8	3.2		
IE3-W41R 315 M2	400	50	132	423	2980	IE3- 95.4	95.0	94.5	0.89	224	10.0	2.0	1.8	3.0	1.44	815
	460	60	145	387	3580	IE3- 95.4	95.0	94.5	0.89	214	10	2	1.8	3		
IE3-W41R 315 MX2	400	50	160	513	2980	IE3- 95.7	95.7	95.0	0.9	268	8.5	2.3	1.7	2.6	2.37	1095
	460	60	165	440	3585	IE3- 95.4	95	94	0.89	244	9	2.5	1.8	2.8		
IE3-W41R 315 MY2	400	50	200	641	2980	IE3- 95.8	95.9	95.5	0.91	331	8.3	2.6	1.6	2.4	2.82	1200
	460	60	220	587	3580	IE3- 95.8	95.3	94.5	0.91	317	8.5	2.8	1.7	2.7		
IE3-W41R 315 L2	400	50	250	800	2985	IE3- 96.0	96.0	95.9	0.92	409	8.4	2.5	1.4	2.3	3.66	1460
	460	60	280	747	3580	IE3- 96	96	95.5	0.92	458	8.2	2.5	1.4	2.3		
IE3-W41R 315 LX2	400	50	315	1008	2985	IE3- 95.8	95.8	95.8	0.92	516	8.5	2.8	1.6	2.5	4.43	1700
	460	60	340	906	3585	IE3- 95.8	95.8	95.5	0.92	484	9.1	2.9	1.6	2.5		

Size 355/400: See Chapter 3 „Transnorm motors“.

Three-phase motors with squirrel-cage rotor, Premium Efficiency IE3

with surface cooling, duty type S1, continuous duty
for rated voltage, thermal class 155 (F), degree of protection IP 55, 50/60 Hz

Motor selection data															Design point 400 V, 50 Hz 460 V, 60 Hz		
Type	U _B	f _B	P _B	M _B	n _B	η _B			cosφ _B	I _B	I _N /I _B	M _N /M _B	M ₂ /M _B	M _K /M _B	J	m	
						IEC/EN 60034-2-1			400 V								
						100 %	75 %	50 %	-	A	-	-	-	-	kgm ²	kg	
Synchronous speed 1500 rpm/1800 rpm – 4-pole version																	
IE3-W42R 63 K4	400	50	0.12	0.84	1365	IE3-	64.8	64.5	59.7	0.72	0.37	3.2	1.9	1.8	2.2	0.00024	5.2
	460	60	0.14	0.81	1660	IE3-	66.0	65.5	61.1	0.71	0.37	3.6	1.9	1.9	2.3		
IE3-W41R 63 G4	400	50	0.18	1.21	1415	IE3-	69.9	67.2	61.2	0.67	0.55	4.4	1.8	1.8	2.7	0.0005	7.1
	460	60	0.21	1.16	1725	IE3-	69.5	68.8	62.9	0.66	0.56	4.8	2.6	2.6	2.9		
IE3-W42R 71 K4	400	50	0.25	1.71	1395	IE3-	73.5	71.2	66.7	0.70	0.72	3.9	2.1	2.1	2.5	0.0005	7.8
	460	60	0.3	1.70	1690	IE3-	73.4	73.6	69.7	0.71	0.72	4.1	2.1	2.1	2.5		
IE3-W41R 71 GY4	400	50	0.37	2.48	1425	IE3-	77.3	76.8	73	0.69	1	4.9	2.4	2.4	3	0.00087	9.9
	460	60	0.44	2.44	1720	IE3-	78.2	77.7	74.1	0.71	0.98	5.2	2.1	2.1	2.9		
IE3-W41R 80 K4	400	50	0.55	3.67	1430	IE3-	80.8	81	80.1	0.80	1.25	6.0	2.4	2.3	2.7	0.00207	14.5
	460	60	0.65	3.60	1725	IE3-	83.5	82.8	79	0.81	1.24	6.2	2.2	2.1	2.6		
IE3-W41R 80 G4	400	50	0.75	4.96	1445	IE3-	82.5	82.3	79.6	0.77	1.7	7.0	3.1	3.1	3.7	0.0026	17
	460	60	0.9	4.94	1740	IE3-	83.5	83.3	80.5	0.79	1.7	7.1	2.8	2.8	3.6		
IE3-W41R 90 SY4	400	50	1.1	7.3	1440	IE3-	84.1	82.6	79.7	0.76	2.5	6.7	2.8	2.7	3.7	0.004	22.5
	460	60	1.3	7.14	1740	IE3-	86.5	86.2	84.3	0.77	2.45	6.8	2.7	2.5	3.3		
IE3-W41R 90 LX4	400	50	1.5	9.84	1455	IE3-	85.3	84	80.6	0.75	3.4	9.5	4.5	3.8	4.9	0.0058	31
	460	60	1.8	9.82	1750	IE3-	86.5	85.3	82.1	0.77	3.4	8.8	3.8	3.4	4.7		
IE3-W41R 100 LW4	400	50	2.2	14.4	1460	IE3-	86.7	86.4	84.3	0.76	4.75	8.6	3.8	3.7	4.5	0.013	50
	460	60	2.6	14.15	1755	IE3-	89.5	88.2	86	0.77	4.75	8.8	3.7	3.5	4.4		
IE3-W41R 100 LZ4	400	50	3	19.7	1455	IE3-	87.7	87.6	86.1	0.77	6.4	8.6	3.2	3.1	4.1	0.013	50
	460	60	3.6	19.60	1750	IE3-	89.5	89	87.6	0.79	6.45	8.1	2.6	2.5	3.6		
IE3-W41R 112 MW4	400	50	4	26	1460	IE3-	88.6	87.9	86.2	0.85	8.0	8.7	2.6	2.4	4.1	0.017	56
	460	60	4.5	24.40	1760	IE3-	89.5	88.2	86.5	0.85	7.45	8.8	2.5	2.2	4.1		
IE3-W41R 132 S4	400	50	5.5	35	1480	IE3-	91.0	90.2	87.8	0.73	12.0	9.9	3.4	2.8	5.4	0.035	90
	460	60	6.6	35	1780	IE3-	91.8	91	88.9	0.77	11.7	9.6	3.1	2.6	5		
IE3-W41R 132 M4	400	50	7.5	49	1475	IE3-	91.3	91.3	90.1	0.83	14.5	8.6	2.4	2.0	3.9	0.043	100
	460	60	9	49	1765	IE3-	91.8	91.7	90.6	0.85	14.5	8	2.3	1.9	3.6		
IE3-W41R 160 M4	400	50	11	71	1475	IE3-	91.4	91.5	90.5	0.83	21.0	7.5	2.5	2.0	3.2	0.078	125
	460	60	12.5	67	1775	IE3-	92.4	91.8	90.6	0.80	21.5	7.4	2.4	2	3.1		
IE3-W41R 160 L4C	400	50	15	96	1490	IE3-	92.8	92.5	91.0	0.83	28.0	10.5	2.8	2.4	3.9	0.1567	175
	460	60	18	96	1785	IE3-	93.6	92.8	91.3	0.85	28.5	9.9	2.6	2.2	3.6		
IE3-W41R 180 M4	400	50	18.5	120	1475	IE3-	92.7	92.9	92.0	0.84	34.5	6.9	1.9	1.7	3.0	0.168	210
	460	60	22	118	1775	IE3-	93.6	93.0	92.3	0.84	35.0	6.5	1.8	1.9	2.8		
IE3-W41R 180 L4	400	50	22	142	1480	IE3-	93.0	93.0	92.1	0.84	40.5	7.6	2.2	2.0	3.2	0.203	240
	460	60	25	134	1775	IE3-	93.6	92.8	91.8	0.85	39.5	7.5	2.1	1.9	3.1		
IE3-W41R 200 L4C	400	50	30	193	1485	IE3-	93.6	92.4	92.4	0.85	54.5	7.0	1.6	1.4	2.6	0.411	327
	460	60	30	160	1790	IE3-	94.1	92.8	91.0	0.84	47.5	7.7	1.7	1.5	2.8		
IE3-W41R 225 S4C	400	50	37	237	1490	IE3-	93.9	93.8	93.2	0.85	67.0	7.4	1.9	1.4	2.7	0.4675	367
	460	60	40	214	1785	IE3-	94.5	93.7	92.5	0.85	62.5	7.5	1.9	1.4	2.7		
IE3-W41R 225 M4	400	50	45	290	1482	IE3-	94.2	94.3	94.0	0.82	84	8.1	2.6	2.1	2.6	0.619	450
	460	60	49	263	1782	IE3-	95	94	91.5	0.83	79	8.7	2.7	2.2	2.7		
IE3-W41R 250 M4	400	50	55	354	1485	IE3-	94.7	94.8	94.4	0.83	101	8.1	2.1	1.8	2.5	0.95	550
	460	60	55	294	1785	IE3-	95.4	94.9	93.5	0.83	87	8.9	2.3	2	2.7		
IE3-W41R 280 S4	400	50	75	482	1485	IE3-	95.0	94.6	94.2	0.83	137	8.2	2.1	1.8	2.5	1.1	617
	460	60	90	482	1783	IE3-	95.4	94.6	94	0.84	141	7.9	2	1.7	2.3		
IE3-W41R 280 M4	400	50	90	578	1487	IE3-	95.2	94.7	94.0	0.83	164	9.2	2.1	1.9	2.7	1.96	785
	460	60	90	480	1790	IE3-	95	95.4	93.2	0.82	144	10	2	1.9	2.9		
IE3-W41R 315 S4	400	50	110	706	1487	IE3-	95.4	95.0	94.3	0.82	203	9.5	1.9	1.7	2.7	1.96	760
	460	60	125	668	1788	IE3-	95.8	95.2	94.3	0.83	197	9.2	2.1	2	2.7		
IE3-W41R 315 M4	400	50	132	849	1485	IE3-	95.6	95.4	95.0	0.83	240	9.0	2.2	1.9	2.7	2.27	850
	460	60	129	689	1787	IE3-	95.8	95.3	94.7	0.83	204	10	2.3	2.1	2.9		
IE3-W41R 315 MX4	400	50	160	1026	1490	IE3-	95.8	95.5	95.0	0.84	287	9.5	2.1	2.0	3.2	4.01	1120
	460	60	175	934	1790	IE3-	96.2	96	95	0.84	272	10	2.1	2	3.2		
IE3-W41R 315 MY4	400	50	200	1282	1490	IE3-	96.0	95.8	95.5	0.87	346	9.5	2.1	1.7	2.7	4.82	1250
	460	60	225	1200	1790	IE3-	96.2	96	95.5	0.86	341	9.5	2.2	1.8	2.7		
IE3-W41R 315 L4	400	50	250	1602	1490	IE3-	96.2	96.2	96.0	0.87	431	9.4	2.2	1.8	2.7	5.93	1450
	460	60	280	1494	1790	IE3-	96.2	96.1	95.7	0.87	420	9.3	2.2	1.8	2.7		
IE3-W41R 315 LX4	400	50	315	2019	1490	IE3-	96.0	96.0	96.0	0.87	544	9.5	2.3	1.7	2.9	6.82	1630
	460	60	315	1680	1790	IE3-	96.2	96.2	95.5	0.87	472	10.5	2.6	1.9	3.2		

Size 355/400: See Chapter 3 „Transnorm motors“.

2

Three-phase motors with squirrel-cage rotor, Premium Efficiency IE3

with surface cooling, duty type S1, continuous duty
for rated voltage, thermal class 155 (F), degree of protection IP 55, 50/60 Hz

Motor selection data															Design point 400 V, 50 Hz 460 V, 60 Hz		
Type	U _B V	f _B Hz	P _B kW	M _B Nm	n _B rpm	η _B IEC/EN 60034-2-1			cosφ _B -	I _B A	I _N /I _B -	M _N /M _B -	M _S /M _B -	M _K /M _B -	J kgm ²	m kg	
						100 %	75 %	50 %									
Synchronous speed 1000 rpm/1200 rpm – 6-pole version																	
IE3-W41R 63 G6	400	50	0.12	1.23	930	IE3-	57.7	60	54	0.56	0.5	2.8	1.9	1.8	2.1	0.00045	6.7
	460	60	0.14	1.18	1130	IE3-	64.0	62.1	56.2	0.54	0.5	3.1	1.8	1.8	2.2		
IE3-W42R 71 KY6	400	50	0.18	1.89	910	IE3-	63.9	62	56.5	0.55	0.75	2.9	1.7	1.7	2.1	0.0006	8.3
	460	60	0.21	1.81	1105	IE3-	67.5	64.6	59.4	0.55	0.73	2.8	1.5	1.5	1.9		
IE3-W41R 71 GY6	400	50	0.25	2.54	940	IE3-	68.6	65.3	58.5	0.63	0.84	4.0	2.2	2.2	2.9	0.0013	10
	460	60	0.3	2.51	1140	IE3-	71.4	68.4	62.4	0.64	0.84	3.9	2.3	2.3	2.7		
IE3-W41R 80 K6	400	50	0.37	3.72	950	IE3-	73.5	72.9	69.2	0.70	1.03	4.0	1.9	1.9	2.4	0.00325	15
	460	60	0.44	3.67	1145	IE3-	75.3	74.8	71.2	0.70	1.03	4.1	1.8	1.8	2.3		
IE3-W41R 80 G6	400	50	0.55	5.53	950	IE3-	77.2	75.9	72.4	0.69	1.5	4.1	2.1	2.1	2.5	0.00425	18
	460	60	0.45	3.67	1170	IE3-	75.3	75.0	69.4	0.58	1.25	5.1	3.0	3.0	3.6		
IE3-W41R 90 SY6	400	50	0.75	7.5	955	IE3-	78.9	78.3	75.1	0.71	1.95	4.9	2.4	2.3	2.6	0.00625	24
	460	60	0.9	7.47	1150	IE3-	82.5	79.6	76.9	0.72	1.95	5.1	2.3	2.1	2.6		
IE3-W41R 90 L6	400	50	1.1	11	955	IE3-	81	81	78.5	0.72	2.7	5.4	2.5	2.4	2.8	0.0072	30
	460	60	0.92	7.51	1170	IE3-	82.3	80.02	74.53	0.62	2.26	6.8	3.5	3	4.2		
IE3-W41R 100 LX6	400	50	1.5	15	955	IE3-	82.5	83.5	81.5	0.76	3.45	5.9	2.3	2.2	2.8	0.0139	36
	460	60	0.92	7.45	1180	IE3-	82.8	80	79.7	0.57	2.45	7.7	3.6	3.6	5.1		
IE3-W41R 132 M6	400	50	4	40.0	965	IE3-	86.8	87.0	86.0	0.80	8.3	4.8	1.7	1.4	2.4	0.043	75
	460	60	4.5	37	1170	IE3-	89.5	88.7	87.6	0.80	7.9	4.8	1.7	1.5	2.4		
IE3-W41R 132 MX6	400	50	5.5	54.0	970	IE3-	88.6	88.6	87.2	0.80	11.0	6.0	2.1	1.7	3.0	0.053	105
	460	60	5.7	46	1175	IE3-	91	89.8	87.5	0.79	10	6.5	2.2	1.9	3.2		
IE3-W41R 160 M6	400	50	7.5	73.0	980	IE3-	90.2	90.0	88.3	0.83	14.5	6.4	2.4	2.0	3.0	0.145	145
	460	60	9	73	1175	IE3-	91.3	90.6	89	0.85	14.6	6	2.2	1.9	2.8		
IE3-W41R 160 L6C	400	50	11	107.0	985	IE3-	91.4	91.2	89.8	0.85	20.5	6.8	2.2	2	2.8	0.166	168
	460	60	13	105	1185	IE3-	91.7	91.4	90	0.86	20.5	6.5	2.1	1.9	2.6		
IE3-W41R 180 L6C	400	50	15	145.0	985	IE3-	91.2	91.3	90.2	0.87	27.5	6.8	2	1.7	2.7	0.3396	214
	460	60	18.5	149	1185	IE3-	93	91.9	90.5	0.85	29.5	6.2	1.8	1.5	2.5		
IE3-W41R 200 L6	400	50	18.5	180.0	980	IE3-	91.8	91.7	90.5	0.87	33.5	7.2	2.3	2	3	0.514	310
	460	60	22	178	1180	IE3-	93	91.7	90.5	0.87	34	6.7	2.1	1.8	2.8		
IE3-W41R 200 LX6C	400	50	22	213.0	985	IE3-	92.2	91.5	90	0.87	39.5	7.6	2.1	1.7	2.9	0.6476	321
	460	60	22	177	1190	IE3-	93	91.4	89.4	0.87	34	6.5	2.4	1.9	3.2		
IE3-W41R 225 M6	400	50	30	291	984	IE3-	92.9	92.2	91.0	0.84	55.5	7.2	2.7	2.2	2.9	0.92	400
	460	60	30							upon request							
IE3-W41R 250 M6	400	50	37	359	985	IE3-	93.3	93.2	92.3	0.86	66.5	7.1	2.8	2.0	2.7	1.48	545
	460	60	40	322	1185	IE3-	94.1	93.3	92	0.86	62	7.2	2.9	2	2.8		
IE3-W41R 280 S6	400	50	45	434	990	IE3-	93.7	93.5	91.5	0.86	80.5	8.5	2.1	1.8	2.8	2.63	695
	460	60	45							upon request							
IE3-W41R 280 M6	400	50	55	531	990	IE3-	94.2	94.1	93.1	0.85	99	9.0	2.2	1.9	3.1	3.33	815
	460	60	55	440	1195	IE3-	94.5	94	92.5	0.85	86	9.5	2.5	2.2	3.4		
IE3-W41R 315 S6	400	50	75	723	990	IE3-	94.6	94.0	93.5	0.86	133	8.2	1.8	1.4	2.3	5.55	1060
	460	60	85							upon request							
IE3-W41R 315 M6	400	50	90	868	990	IE3-	94.9	94.0	93.0	0.86	159	8.5	2.2	1.7	2.8	6	1100
	460	60	99														
IE3-W41R 315 MX6	400	50	110	1.061	990	IE3-	95.1	95.0	94.5	0.86	194	8.5	2.5	1.7	2.7	6.67	1210
	460	60	120							upon request							
IE3-W41R 315 L6	400	50	132	1.267	995	IE3-	95.4	95.0	94.5	0.87	230	9.0	2.8	2.0	3.2	8.6	1550
	460	60	132	1055	1195	IE3-	95.8	95.3	94.4	0.84	206	9.5	3	2.2	3.5		

Size 355/400: See Chapter 3 „Transnorm motors“.

Three-phase motors with squirrel-cage rotor, Premium Efficiency IE3

with surface cooling, duty type S1, continuous duty
for rated voltage, thermal class 155 (F), degree of protection IP 55, 50/60 Hz

Motor selection data															Design point 400 V, 50 Hz 460 V, 60 Hz		
Type	U _B	f _B	P _B	M _B	n _B	η _B			cosφ _B	I _B	I _A /I _B	M _A /M _B	M _G /M _B	M _K /M _B	J	m	
						IEC/EN 60034-2-1			400 V								
						100 %	75 %	50 %	-	A	-	-	-	-	kgm ²	kg	
Synchronous speed 750 rpm/900 rpm – 8-pole version																	
IE3-W41R 71 G8	400	50	0.12	1.67	685	IE3-	50.7	48.8	43	0.64	0.48	2.6	1.7	1.7	2	0.0013	9.9
	460	60	0.14	1.59	840	IE3-	59.5	59.1	52.7	0.61	0.47	2.8	1.8	1.8	2.1		
IE3-W42R 80 K8	400	50	0.18	2.53	680	IE3-	58.7	56.3	49.8	0.61	0.73	2.6	1.6	1.6	2	0.00175	12
	460	60	0.21	2.39	840	IE3-	64.0	59	51.1	0.55	0.77	2.9	1.9	1.9	2.4		
IE3-W41R 80 G8	400	50	0.25	3.39	705	IE3-	64.1	64.3	58.4	0.59	0.93	3.0	1.4	1.4	2.1	0.003	14
	460	60	0.3	3.33	860	IE3-	68.0	65.8	59.8	0.55	0.98	3.1	1.3	1.3	2.2		
IE3-W41R 90 S8	400	50	0.37	4.98	710	IE3-	69.3	69	64.4	0.63	1.2	3.6	2.1	2.1	2.3	0.00625	25
	460	60	0.44	4.91	855	IE3-	72	69.3	64.8	0.63	1.22	3.2	1.6	1.6	1.9		
IE3-W41R 100 L8	400	50	0.75	10.0	715	IE3-	75	75.9	71.3	0.63	2.25	4.4	2.5	2.5	2.8	0.0123	33.5
	460	60	0.9	9.95	865	IE3-	75.5	78.8	75.5	0.66	2.12	4.8	2.3	2.3	2.8		
IE3-W41R 100 LW8	400	50	1.1	14.69	715	IE3-	77.7	76.8	73	0.66	3.09	4.7	2.3	2.3	3	0.009	35
	460	60	1.25	13.8	865	IE3-	78.5	77.4	73.5	0.65	2.98	5.1	2.3	2.3	3.2		
IE3-W41R 112 M8	400	50	1.5	20.5	700	IE3-	79.7	78.7	76	0.65	4.25	3.8	1.6	1.5	2.1	0.0155	48
	460	60	1.25	13.72	870	IE3-	80.4	78.3	73.6	0.55	3.7	3.7	2	2	2.9		
IE3-W41R 132 S8	400	50	2.2	29	725	IE3-	84.4	84.5	82.4	0.7	5.4	4.1	1.6	1.5	2.3	0.043	80
	460	60	2.6	28	875	IE3-	85.6	85.7	83.7	0.71	5.4	4.0	1.5	1.4	2.2		
IE3-W41R 132 M8	400	50	3	40	720	IE3-	83.5	83.5	81.4	0.72	7	3.9	1.6	1.4	2.1	0.043	74
	460	60	3							upon request							
IE3-W41R 160 M8	400	50	4	52	735	IE3-	87	86.7	83.8	0.71	9.4	5.4	2.5	2.2	2.9	0.113	119
	460	60	4.8	51	885	IE3-	88.4	87.9	85.4	0.72	9.5	5.1	2.3	2.0	2.6		
IE3-W41R 160 MX8	400	50	5.5	72	730	IE3-	87.5	87.5	85.6	0.73	12.5	4.7	1.9	1.7	2.5	0.145	143
	460	60	5.5							upon request							
IE3-W41R 160 L8	400	50	7.5	98	733	IE3-	87.9	87.6	85.6	0.73	17	5.1	2.1	1.8	2.7	0.166	155
	460	60	7.5							upon request							
IE3-W41R 180 L8	400	50	11	145	725	IE3-	89.3	89	87.1	0.75	23.5	5.4	2.1	1.9	2.8	0.228	175
	460	60	11							upon request							
IE3-W41R 200 L8	400	50	15	196	730	IE3-	89.6	87.6	85.6	0.80	30	5.3	1.8	1.7	2.5	0.324	235
	460	60	18	196	878	IE3-	90.3	90.7	89.7	0.80	31.5	4.9	1.7	1.6	2.3		
IE3-W41R 225 S8	400	50	18.5	240	735	IE3-	90.1								0.514	310	
	460	60	18.5							upon request							
IE3-W41R 225 M8	400	50	22	286	735	IE3-	91.5	91.6	90.6	0.79	44	5.7	2.3	2	2.5	0.825	360
	460	60	22							upon request							
IE3-W41R 250 M8	400	50	30	391	732	IE3-	91.3	91.9	91.4	0.81	58.5	5.4	2	1.8	2.3	0.92	420
	460	60	30							upon request							
IE3-W41R 280 S8	400	50	37	479	738	IE3-	92	92	90.8	0.78	74.5	5.9	2.3	1.8	2.4	1.55	555
	460	60	37							upon request							
IE3-W41R 280 M8	400	50	45	581	740	IE3-	93	93	92.4	0.78	89.5	6.5	1.7	1.5	2.4	2.63	700
	460	60	54	579	890	IE3-	93.6	93	92.4	0.79	91.5	6	1.5	1.3	2.1		
IE3-W41R 315 S8	400	50	55	712	738	IE3-	92	92	90.8	0.78	74.5	5.9	2.3	1.8	2.4	3.33	805
	460	60	55							upon request							
IE3-W41R 315 M8	400	50	75	965	742	IE3-	93.8	94.2	93.8	0.81	142	7.0	1.9	1.7	2.3	5.55	1120
	460	60	75							upon request							
IE3-W41R 315 MX8	400	50	90	1157	743	IE3-	94.3	94.4	93.6	0.8	172	7.9	2.4	2.0	2.7	6	1185
	460	60	108	1152	895	IE3-	94.8	94.7	94.7	0.78	183	8	1.6	1.6	2.6		
IE3-W41R 315 MY8	400	50	110	1419	740	IE3-	93.8	94.0	93.5	0.82	206	6.5	1.9	1.5	2.1	6.76	1250
	460	60	120	1288	890	IE3-	94.2	94.2	94.2	0.82	195	6.6	1.8	1.6	2.2		
IE3-W41R 315 L8	400	50	132	1703	740	IE3-	94.2	94.2	93.5	0.8	253	8.0	2.4	1.9	2.7	8.71	1450
	460	60	132							upon request							

Size 355/400: See Chapter 3 „Transnorm motors“.