

Single-phase asynchronous motor

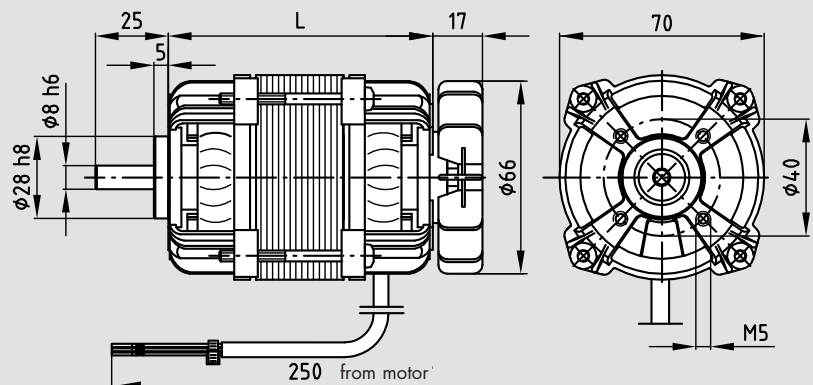
- Properties:**
- Connection: 230 V / 50 Hz AC system , optional designs for 110 V / 60 Hz or other voltages / frequencies
Running capacitor required
Cable connection, optional plug-in connector
 - Service life: 20,000 hours, S1 duty
 - Insulation mat.class: B, optional F
 - System of protection: IP 00 (open design)
 - Special model: Design for short-time duty with high performance
Alloy rotor for higher starting torque
 - Options: Thermal protection, special shafts, custom designed



Type	Name			Es 7120-2	Es 7140-2	Es 7160-2
	Nominal voltages	U	AC voltage	230	230	230
Specification	Nominal power	P ₂	W	31	56	94
	Nominal speed	N _{nom}	rpm	2700	2700	2700
	Nominal torque	T _{nom}	Ncm	11	20	33.5
	Starting torque	T _A	Ncm	11	12	19
	Nominal current	I _{nom}	mA	426	520	750
	No-load current	I ₀	mA	406	382	620
Characteristics	Locked rotor speed	n _{break}	rpm	2000	2300	2200
	Locked rotor torque	T _{break}	Ncm	19	31	51
	Nominal efficiency	η		0.43	0.53	0.56
Connection	Terminal resistance	R	Ohm	211	92	38
	Input power	P ₁	W	99	118	175
	Running capacitor	C	μF	3.0	3.0	5.0
Dynamics	Weight	m	kg	1.0	1.4	1.8
	Moment of inertia	J	gcm ²	219	376	533
Thermal	Adm. ambient temperature	T _a	°C	-20 to +40	-20 to +40	-20 to +40
	Max. adm. stator temperature	T _{max}	°C	+120	+120	+120
Coupling	Shaft diameter	d	mm	8	8	8
	Max. axial force	F _a	N	20	20	20
	Max. radial force	F _r	N	200	200	200

Dimensions

Type	L / mm
Es 71202	80
Es 71402	100
Es 71602	120



System technology

Recommended combinations other gears and extensions upon request	Worm gear	GS 3
	Spur gear	Z 8
	Planetary gear	PM 60
	Rotary encoder	upon request
	Brake	upon request

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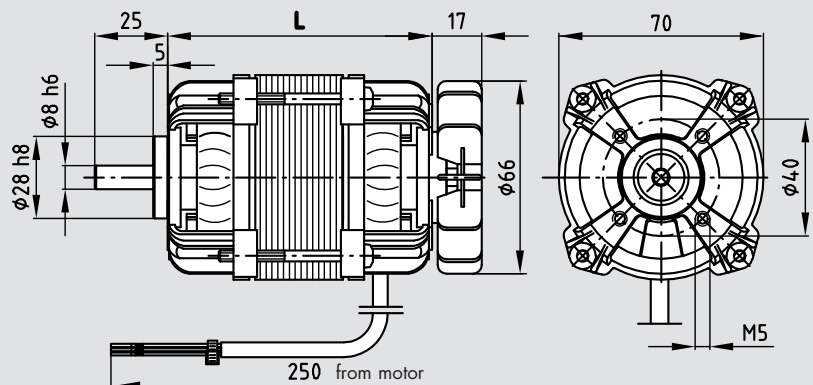
Properties:	Connection:	230 V / 50 Hz AC system , optional designs for 110 V / 60 Hz or other voltages / frequencies Running capacitor required Cable connection, optional plug-in connector
	Service life:	20,000 hours, S1 duty
	Insulation mat. class:	B, optional F
	System of protection:	IP 00 (open design)
	Special model:	Design for short-time duty with high performance Alloy rotor for higher starting torque
	Options:	Thermal protection, special shafts, custom designed



Type	Name			Es 7140-4	Es 7160-4
	Nominal voltages	U	AC voltage	230	230
Specification	Nominal power	P ₂	W	22	43
	Nominal speed	N _{nom}	rpm	1300	1300
	Nominal torque	T _{nom}	Ncm	16.5	32.0
	Starting torque	T _A	Ncm	13.5	26.5
	Nominal current	I _{nom}	mA	300	440
	No-load current	I ₀	mA	270	348
Characteristics	Locked rotor speed	n _{break}	rpm	930	970
	Locked rotor torque	T _{break}	Ncm	21.0	37.5
	Nominal efficiency	η		0.35	0.35
Connection	Terminal resistance	R	Ohm	222	117
	Input power	P ₁	W	63	106.5
	Running capacitor	C	μF	4.0	6.0
Dynamics	Weight	m	kg	1.4	1.8
	Moment of inertia	J	gcm ²	376	533
Thermal	Adm. ambient temperature	T _a	°C	-20 to +40	-20 to +40
	Max. adm. stator temperature	T _{max}	°C	+120	+120
Coupling	Shaft diameter	d	mm	8	8
	Max. axial force	F _a	N	20	20
	Max. radial force	F _r	N	220	220

Dimensions

Type	l / mm
Es 7140-4	100
Es 7160-4	120



System technology

Recommended combinations

other gears and extensions upon request

Worm gear	GS 3
Spur gear	Z 8
Planetary gear	PM 60
Rotary encoder	upon request
Brake	upon request