

Datenblatt / Datasheet

11 kW - 2-polig - IE2

Elektrische Daten / Electrical Data		
Motorleistung / <i>Power</i>	11,0 / 13,2	kW 50/60 Hz
Motordrehzahl / <i>Rotation speed</i>	2930	rpm / 50 Hz
	3516	rpm / 60 Hz
Spannung / <i>Voltage</i>	400	V Δ / 50 Hz
	690	V Y / 50 Hz
	460	V Δ / 60 Hz
	795	V Y / 60 Hz
Motornennmoment / <i>Torque</i>	35,9	Nm (Mn)
Nennstrom / <i>Current</i>	20,0 / 11,6	A (In) / 50 Hz
	20,5 / 11,9	A (In) / 60 Hz
Anzugsstrom / <i>Starting current</i>	7,9	x In
Anlaufmoment / <i>Starting torque</i>	2,2	x Mn
Kippmoment / <i>Breakdown torque</i>	2,3	x Mn
Wirkungsgrad / <i>Efficiency factor</i>	89,40%	100%
	89,80%	75%
	87,60%	50%
Wirkungsgradklasse <i>Efficiency class</i>	IE2	
Leistungsfaktor / <i>Power factor</i>	0,89	100%

Mechanische Daten / Mechanical data		
Schalldruckpegel / <i>Sound pressure level</i>	72	dB(A)
Trägheitsmoment / <i>Moment of inertia</i>	0,0385	Kgm ²
Lager AS / <i>bearing DE</i>	6309.ZZ.C3	
Lager BS / <i>bearing NDE</i>	6309.ZZ.C3	
nom. Lagerlebensdauer / <i>bearing lifetime</i>	20.000 h	bei Fr + Fx
zulässige Radiallast (Fr) / <i>allowed radial load (Fr)</i>	2585 N	Wellenmitte / <i>middle of shaft</i>
zulässige Axiallast (Fx) / <i>allowed axial load (Fx)</i>	1650 N	Zug / <i>pull</i>
	1650 N	Druck / <i>pressure</i>
Art der Lagerung / <i>type of bearing</i>	Festlager BS / fixed bearing NC	
		Standard

Allgemeine Daten / General data		
Motorbaugröße / <i>Frame size</i>	160 M	
Gewicht / <i>Weight</i>	108	kg
Gehäuse / <i>Housing</i>	Grauguss / cast iron housing	
Schutzart / <i>Protection class</i>	IP 55	
Isolationsklasse / <i>Insulation class</i>	F nach B / F to B	
Tropenisolation / <i>Tropicalized</i>	nein / no	
Schwingstufe / <i>Vibration class</i>	A	
Läufer sind / <i>Rotors are</i>	Halbkeil gewuchtet half-key balanced	
Betriebsart / <i>Operation mode</i>	S1	
Drehrichtung / <i>Direction of rotation</i>	rechts / links / right / left	
Kühlart / <i>TEFC</i>	IC 411	
Kabelverschraubung / <i>Cable glands</i>	2x M40x1,5, 1x M20x1,5	
Normen / <i>Regulations</i>	IEC / DIN / ISO / VDE / EN	
Ausführung nach / <i>Acc. to</i>	IEC 60034 -1	
Anstrich / <i>Painting</i>	RAL 7030	

Explosionsschutz / Explosion protection		
Zündschutzart / <i>type of protection</i>	ohne / without	

Umweltbedingungen / Environmental conditions		
Kühlmitteltemperatur / <i>cooling medium temperature</i>	-20°C bis +40°C	
max. Aufstellhöhe <i>max. height of location</i>	1.000	m über NN / m over NN

Zubehör / Accessories		
3 eingebaute Kaltleiter / 3 built-in PTC		

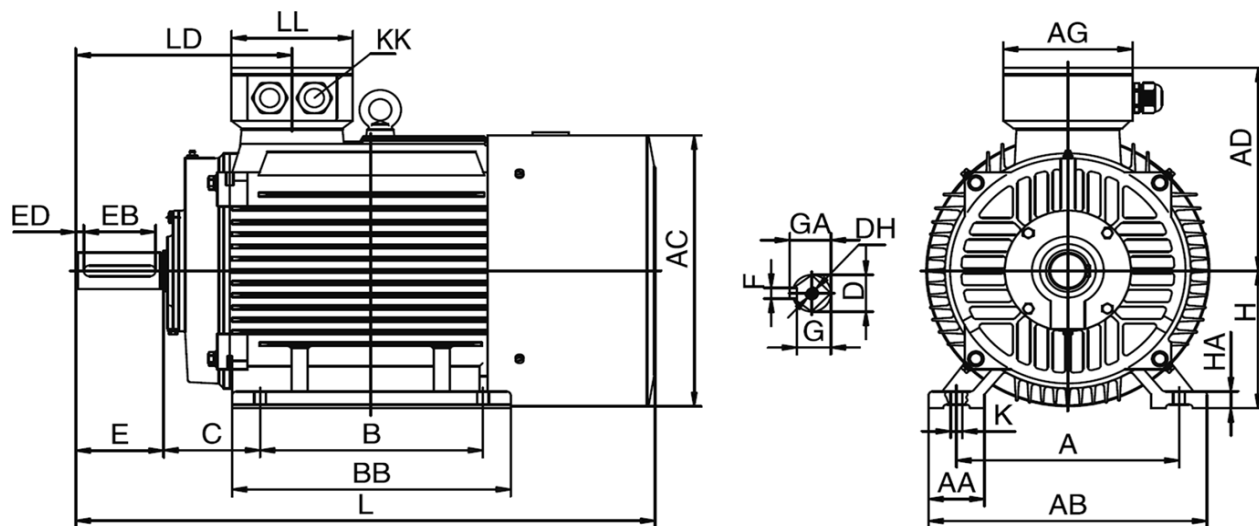
Technische Änderungen und Irrtümer vorbehalten / Technical modifications reserved, errors excepted

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## Maßbilder / Drawings

**ACM 160 MA-2/HE**

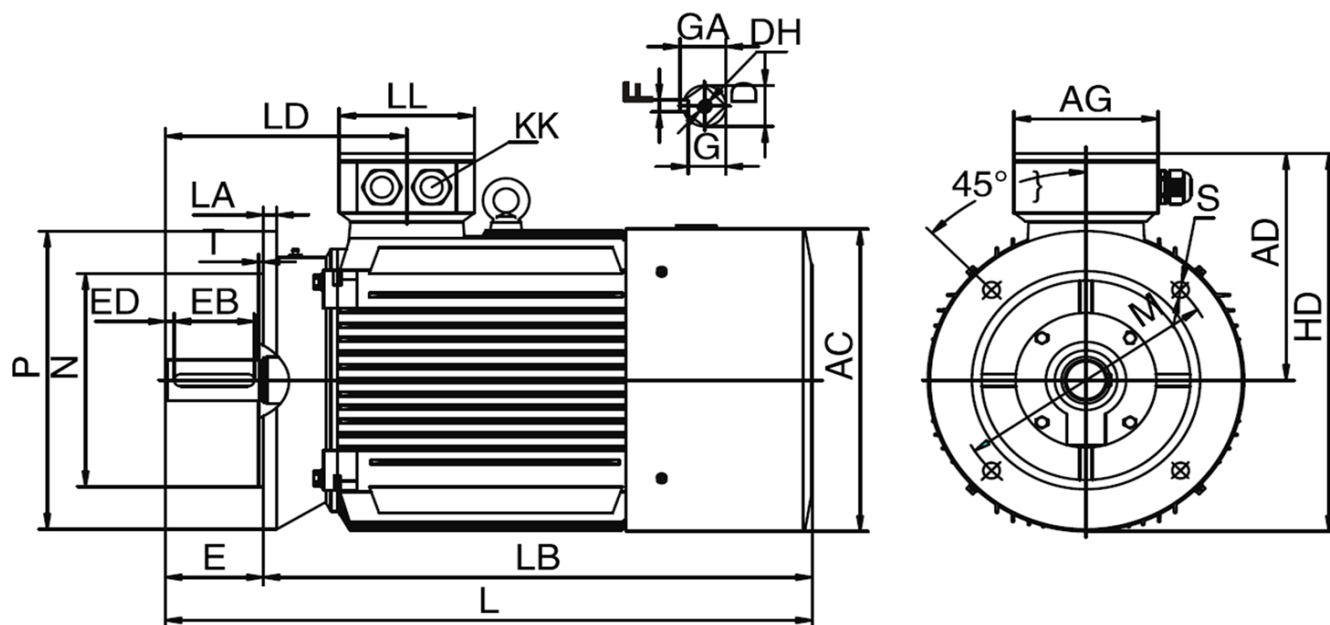
**IM B3 / IM 1001**



| TYP  | A   | AA | AB  | AC  | AD  | AG  | B   | BB  | C   | D  | DH     | E   | EB | ED | F  | G  | GA | H   | HA | K       | KK        | L   | LD  | LL  |
|------|-----|----|-----|-----|-----|-----|-----|-----|-----|----|--------|-----|----|----|----|----|----|-----|----|---------|-----------|-----|-----|-----|
| 160M | 254 | 65 | 314 | 314 | 251 | 162 | 210 | 260 | 108 | 42 | M16X36 | 110 | 90 | 10 | 12 | 37 | 45 | 160 | 20 | 4-Ø14,5 | 2-M40X1,5 | 608 | 256 | 152 |

**FCM 160 MA-2/HE**

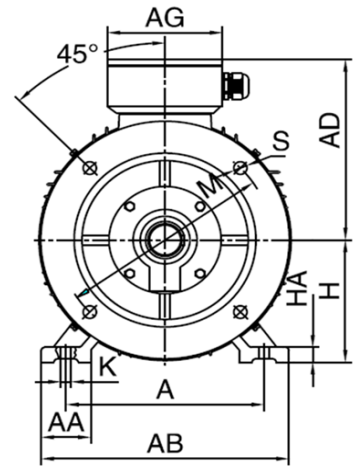
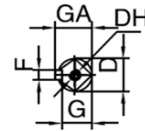
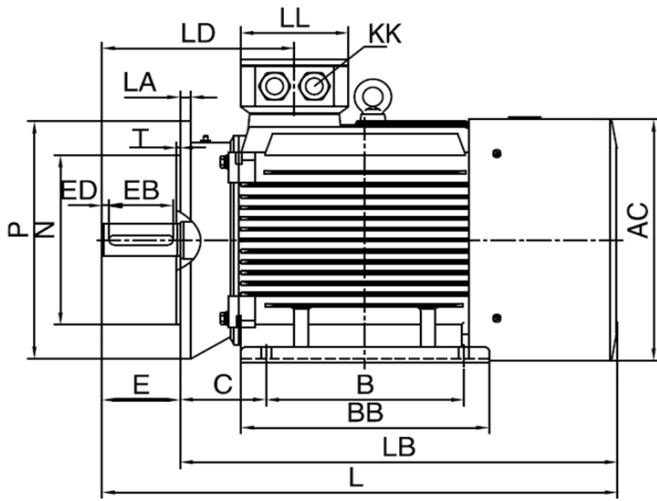
**IM B5 / IM 3001**



| TYP  | AC  | AD  | AG  | D  | DH     | E   | EB | ED | F  | G  | GA | HD  | KK        | L   | LA | LB  | LD  | LL  | M   | N   | P   | S    | T |
|------|-----|-----|-----|----|--------|-----|----|----|----|----|----|-----|-----------|-----|----|-----|-----|-----|-----|-----|-----|------|---|
| 160M | 314 | 251 | 162 | 42 | M16X36 | 110 | 90 | 10 | 12 | 37 | 45 | 426 | 2-M40X1,5 | 608 | 15 | 498 | 256 | 152 | 300 | 250 | 350 | 18,5 | 5 |

**FCMP 160 MA-2/HE**

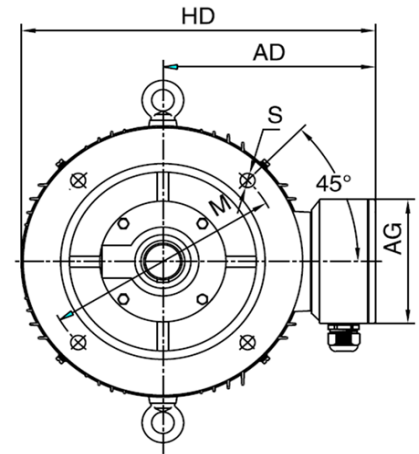
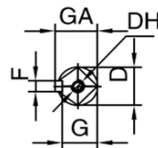
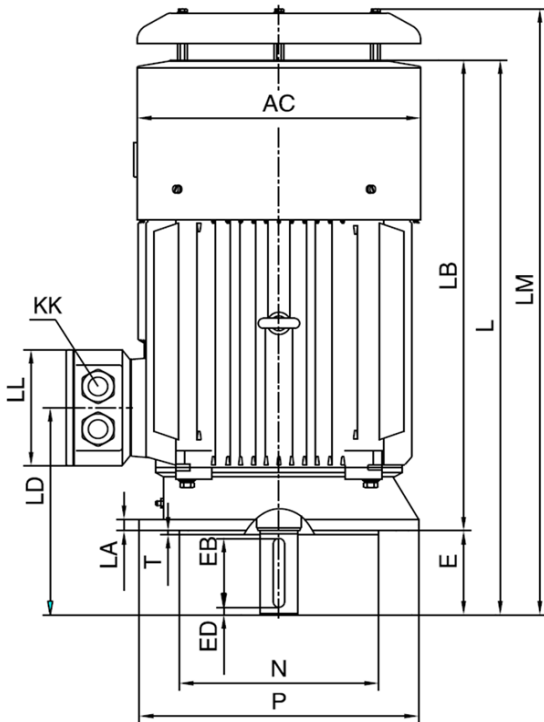
**IM B35 / IM 2001**



| TYP  | A   | AA | AB  | AC  | AD  | AG  | B   | BB  | C   | D  | DH     | E   | EB | ED | F  | G  | GA | H   | HA | K       | KK        | L   | LA | LB  | LD  | LL  | M   | N   | P   | S    | T |
|------|-----|----|-----|-----|-----|-----|-----|-----|-----|----|--------|-----|----|----|----|----|----|-----|----|---------|-----------|-----|----|-----|-----|-----|-----|-----|-----|------|---|
| 160M | 254 | 65 | 314 | 314 | 251 | 162 | 210 | 260 | 108 | 42 | M16X36 | 110 | 90 | 10 | 12 | 37 | 45 | 160 | 20 | 4-Ø14,5 | 2-M40X1,5 | 608 | 15 | 498 | 256 | 152 | 300 | 250 | 350 | 18,5 | 5 |

**FCM 160 MA-2/HE**

**IM V1 / IM 3011**



| TYP  | AC  | AD  | AG  | D  | DH     | E   | EB | ED | F  | G  | GA | HD  | KK        | L   | LA | LB  | LD  | LL  | LM  | M   | N   | P   | S    | T |
|------|-----|-----|-----|----|--------|-----|----|----|----|----|----|-----|-----------|-----|----|-----|-----|-----|-----|-----|-----|-----|------|---|
| 160M | 314 | 251 | 162 | 42 | M16X36 | 110 | 90 | 10 | 12 | 37 | 45 | 426 | 2-M40X1,5 | 608 | 15 | 498 | 256 | 152 | 670 | 300 | 250 | 350 | 18,5 | 5 |