

# 伺服馬達

## EMMT-AS-190-MK-HS-R3MYB

料號: 8148377

FESTO



### 技術參數

特性	值
環境溫度	-15 ... 40 °C
Note on ambient temperature	up to 80°C with derating -1.5%/°C
Max. installation height	4,000 m
Note on max. installation height	As of 1,000 m, only with derating of -1.0% per 100 m
儲藏溫度	-20 ... 70 °C
相對空氣濕度	0 - 90 %
符合標準	IEC 60034
根據EN60034-1的熱量等級	F
Max. winding temperature	155 °C
根據EN60034-1的速率等級	S1
溫度監控	Digital motor temperature transmission via EnDat® 2.2
Motor type to EN 60034-7	IM B5 IM V1 IM V3
裝配位置	任何
防護等級	IP21
Note on degree of protection	IP21 for motor shaft without rotary shaft seal IP65 motor shaft with RWDR IP67 for motor housing with connection technology
Concentricity, coaxiality, axial runout to DIN SPEC 42955	N
Balance quality	G 2,5
Detent torque	<1.0% of peak torque
Storage lifetime under nominal conditions	20,000 h
Woodruff 軸設計關鍵	DIN 6885 A 10 x 8 x 45
Interface code, motor out	190B
Electrical connection 1, connection type	Hybrid plugs
Electrical connection 1, connection technology	M40x1
Electrical connection 1, number of pins/wires	15
污染程度	2
材料備註	符合 RoHS
耐腐蝕等級 CRC	0 - No corrosion stress
PWIS conformity	VDMA24364 zone III
耐振動	符合 EN 60068-2-6
耐衝擊	符合 EN 60068-2-29 15 g/11 ms to EN 60068-2-27
授權	c UL us - Recognized (OL)
CE 符號 (參見符合的標準)	根據 EU-EMV 指導原則 根據 EU 低電壓設備指導原則 in accordance with EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for electrical equipment To UK instructions for EMC To UK RoHS instructions
認證核發部門	TÜV 968/FSP 2317.00/21 UL E342973
額定工作電壓 DC	680 V

特性	值
Type of winding switch	Star inside
Number of pole pairs	5
靜止扭矩	76.7 Nm
額定扭矩	59.1 Nm
峰值 (最大) 扭矩	118.3 Nm
額定擺動速度	1,200 1/min
最高速度	2,163 1/min
Max. mechanical speed	8,000 1/min
額定馬達功率	7,427 W
連續的開路電流	25 A
額定馬達電流	19.2 A
峰值 (最大) 電流	41.5 A
馬達恆定	3.08 Nm/A
Standstill torque constant	3.56 Nm/A
Voltage constant, phase-to-phase	215.2 mV/min
Phase-phase winding resistance	0.285 Ohm
Phase-phase winding inductance	12.3 mH
Winding longitudinal inductivity Ld (phase)	5.65 mH
Winding cross inductivity Lq (phase)	6.15 mH
Electric time constant	39.6 ms
Thermal time constant	70 min
Thermal resistance	0.31 K/W
Measuring flange	450 x 450 x 30, steel
斷電時轉動慣量總和	160 kgcm <sup>2</sup>
產品重量	50,600 g
容許的軸向驅動軸負載	500 N
容許的徑向軸負載	2,530 N
轉子位置感測器	Safety Enc. absolut multi turn
Rotor position sensor, manufacturer designation	EQI 1331
Rotor position sensor, absolute detectable revolutions	4,096
Rotary position encoder interface	EnDat 22
Rotary position encoder measuring principle	電感式
Rotor position sensor, DC operating voltage	5 V
Rotor position sensor, DC operating voltage range	3.6 ... 14 V
Rotor position sensor, position values per revolution	524,288
轉子位置編碼器起動裝置	19 Bit
Rotor position sensor, system accuracy of angle measurement	-65 ... 65 arcsec
剎車保持扭矩	115 Nm
制動裝置的DC工作電壓	24 V
Brake current consumption	2.08 A
制動裝置的電力消耗	50 W
Brake separation time	190 ms
Brake closing time	65 ms
DC brake response delay	12 ms
Max. brake no-load speed	8,000 1/min
剎車的質量慣性力矩	50 kgcm <sup>2</sup>
Switching cycles, holding brake	5 million idle actuations (without work of friction!)
Safety Integrity Level (SIL), component parts	SIL 2, encoder
Performance Level (PL), component parts	Category 3, Performance Level d, encoder
PFHd, component parts	15 x 10E-9, encoder
Duration of use Tm, component parts	20 years, rotor position encoder
MTTF, subcomponent	190 years, rotor position sensor
Energy efficiency	ENEFF (CN) / Class 1