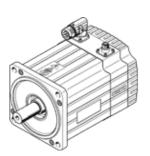
## servo motor EMMS-AS-140-S-HV-RS-S1 Part number: 1574640 Product to be discontinued

Without gear unit.





## **Data sheet**

Ambient temperature	Feature	Value
Relative air humidity 0 - 90 % Conforms to standard IEC 60034 III insulation protection class F Rating class according to EN 60034-1 S1 Protection class IP65 Frotection class IP65 Electrical connector system Plug Materials note Corrosion resistance classification CRC 2 - Moderate corrosion stress  PWIS conformity VDMA24364-B2-L Authorisation RCM Mark Cut Lus - Recognized (OL) CE mark (see declaration of conformity)  UKCA marking (see declaration of conformity)  To UK instructions for electrical equipment To UK instructions for EMC To UK RoHS instructions Nominal voltage DC S65 V Type of winding switch Star inside Number of pole pairs 6 Standstill torque 11.08 Nm Nominal torque 7.7 Nm Nominal torque 7.7 Nm Nominal torque 7.7 Nm Nominal motor power Nominal motor power Nominal motor current 5.23 A Nominal motor current 5.23 A Motor Constant Voltage constant, phase-to-phase Phase-phase winding inductance Overall mass moment of inertia at power take-off 8.189 kgcm2	Ambient temperature	-10 40 °C
Insulation protection class   F	Storage temperature	-20 60 °C
Insulation protection class Rating class according to EN 60034-1 S1 Promperature monitoring Protection class Ile65 Electrical connector system Plug Materials note Corrosion resistance classification CRC 2 - Moderate corrosion stress PWIS conformity VDMA24364-B2-L Authorisation RCM Mark cUL us - Recognized (OL) CE mark (see declaration of conformity) to EU directive for EMC to EU directive low-voltage devices in accordance with EU ROHS instructions for electrical equipment To UK instructions for electrical equipment To UK RoHS instructions  Nominal voltage DC Type of winding switch Number of pole pairs 6 Standstill torque 11.08 Nm Nominal torque 17.7 Nm Peak torque 17.7 Nm Peak torque 19.3 Nominal motor power 3,140 W Nominal motor power 3,140 W Nominal motor power 3,140 W Nominal motor current 5,23 A Peak current Motor constant Voltage constant, phase-to-phase 16.5 On The Standard 16.6 Ohm Phase-phase winding resistance 1.6 Ohm Phase-phase winding inductance Voreal mass moment of inertia at power take-off 8,188 kgcm2	Relative air humidity	0 - 90 %
Rating class according to EN 60034-1  Temperature monitoring PTC resistor Protection class Electrical connector system Plug Materials note Conforms to RoHS Corrosion resistance classification CRC 2 - Moderate corrosion stress  WIS conformity VDMA24364-B2-L Authorisation RCM Mark c UL us - Recognized (OL) to EU directive for EMC to EU directive low-voltage devices in accordance with EU RoHS directive UKCA marking (see declaration of conformity) To UK instructions for electrical equipment To UK instructions for electrical equipment To UK RoHS instructions  Nominal voltage DC Type of winding switch Star inside Number of pole pairs 6 Standstill torque 11.08 Nm Nominal torque 7.7 Nm Peak torque 27 Nm Nominal rotary speed 3,900 1/min Max. speed 4,510 1/min Nominal motor power 3,140 W Nominal motor power 3,140 W Nominal motor current 5,23 A Peak current Motor constant 1,47 Nm/A Voltage constant, phase-to-phase Mass phase winding resistance 1,6 Ohm Phase-phase winding inductance Overall mass moment of inertia at power take-off 8,188 kgcm2	Conforms to standard	IEC 60034
Temperature monitoring PTC resistor Protection class IP65 Electrical connector system Plug Materials note Conforms to ROHS Corrosion resistance classification CRC 2 - Moderate corrosion stress PWIS conformity VDMA24364-B2-L Authorisation RCM Mark culturs - Recognized (Ot) CE mark (see declaration of conformity) to EU directive for EMC to EU directive low-voltage devices 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 Nominal voltage DC 565 V Type of winding switch Star inside Number of pole pairs 6 Standstill torque 11.08 Nm Nominal torque 7.7 Nm Peak torque 27 Nm Nominal rotary speed 3,900 1/min Max. speed 4,510 1/min Nominal motor power 3,140 W Nominal motor current 5.23 A Peak current 24.4 A Motor constant 1.47 Nm/A Voltage constant, phase-to-phase 88.71 mVmin Phase-phase winding inductance 9.01 mH Overall mass moment of inertia at power take-off 8.189 kgcm2	Insulation protection class	F
Protection class IP65 Electrical connector system Plug Materials note Conforms to RoHS Corrosion resistance classification CRC 2 - Moderate corrosion stress  PWIS conformity VDMA24364-B2-L Authorisation RCM Mark  CUL us - Recognized (OL)  CE mark (see declaration of conformity) to EU directive for EMC to EU directive low-voltage devices 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  Nominal voltage DC 565 V  Type of winding switch Star inside  Number of pole pairs 6 Standstill torque 11.08 Nm Nominal torque 7.7 Nm Peak torque 27 Nm Nominal rotary speed 3,900 1/min Max. speed 4,510 1/min Mominal motor power 3,140 W Nominal motor current 5.23 A Peak current 24.4 A Motor constant 1.47 Nm/A Voltage constant, phase-to-phase 88.71 mVmin Phase-phase winding resistance 1.6 Ohm Phase-phase winding rinctran at power take-off 8.189 kgcm2	Rating class according to EN 60034-1	S1
Electrical connector system Plug Materials note Conforms to RoHS Corrosion resistance classification CRC 2 - Moderate corrosion stress  PWIS conformity VDMA24364-B2-L  Authorisation RCM Mark C UL us - Recognized (OL)  CE mark (see declaration of conformity) to EU directive for EMC to EU directive low-voltage devices in accordance with EU RoHS directive  UKCA marking (see declaration of conformity) To UK instructions for electrical equipment To UK instructions for electrical equipment To UK roth sinstructions for EMC To UK RoHS instructions  Nominal voltage DC 565 V Type of winding switch Star inside  Number of pole pairs 6 Standstill torque 11.08 Nm  Nominal torque 7.7 Nm Peak torque 27 Nm Nominal rotary speed 3,900 1/min  Max. speed 4,510 1/min  Nominal motor current 5.23 A Peak current 1.47 Nm/A  Nominal motor current 24.4 A Motor constant 1.47 Nm/A  Voltage constant, phase-to-phase 88.71 mVmin Phase-phase winding inductance 9.01 mH  Overall mass moment of inertia at power take-off 8.189 kgcm2	Temperature monitoring	PTC resistor
Materials note Corrosion resistance classification CRC 2 - Moderate corrosion stress  PWIS conformity Authorisation RCM Mark c UL us - Recognized (OL) CE mark (see declaration of conformity) to EU directive for EMC to EU directive for EMC To UK instructions for electrical equipment To UK instructions for electrical equipment To UK instructions for EMC To UK RoHS instructions  Nominal voltage DC Standstill torque Star inside Number of pole pairs 6 Standstill torque 7.7 Nm Peak torque 27 Nm Nominal torque 27 Nm Nominal rotary speed 3,900 1/min Max. speed 4,510 1/min Nominal motor power 3,140 W Nominal motor current 5.23 A Peak current 1.47 Nm/A Motor constant Voltage constant, phase-to-phase Phase-phase winding resistance Phase-phase winding inductance Overall mass moment of inertia at power take-off 8.189 kgcm2	Protection class	IP65
Corrosion resistance classification CRC  PWIS conformity  Authorisation  CUL us - Recognized (OL)  CE mark (see declaration of conformity)  To EU directive for EMC to EU directive low-voltage devices 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  Nominal voltage DC  Type of winding switch  Number of pole pairs  6  Standstill torque  11.08 Nm  Nominal torque  7.7 Nm  Peak torque  7.7 Nm  Peak torque  3,900 1/min  Max. speed  4,510 1/min  Nominal motor power  3,140 W  Nominal motor current  5,23 A  Peak current  1.47 Nm/A  Motor constant  Voltage constant, phase-to-phase Phase phase winding resistance Phase phase winding inductance Overall mass moment of inertia at power take-off  8.189 kgcm2	Electrical connector system	Plug
PWIS conformity  Authorisation  RCM Mark  C UL us - Recognized (OL)  to EU directive for EMC  to EU directive low-voltage devices 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  Nominal voltage DC  To Winding switch  Star inside  Number of pole pairs  6  Standstill torque  11.08 Nm  Nominal torque  7.7 Nm  Peak torque  27 Nm  Nominal rotary speed  3,900 1/min  Max. speed  4,510 1/min  Nominal motor power  Nominal motor current  5.23 A  Peak current  4.4 A  Motor constant  Voltage constant, phase-to-phase  Phase-phase winding resistance  Phase-phase winding inductance  Overall mass moment of inertia at power take-off  8.189 kgcm2	Materials note	Conforms to RoHS
Authorisation  RCM Mark c UL us - Recognized (OL)  CE mark (see declaration of conformity)  to EU directive for EMC to EU directive low-voltage devices 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  Nominal voltage DC  Tope of winding switch  Number of pole pairs  6  Standstill torque  11.08 Nm  Nominal torque  7.7 Nm  Peak torque  27 Nm  Nominal rotary speed  Max. speed  Max. speed  4,510 1/min  Nominal motor power  3,140 W  Nominal motor current  5.23 A  Peak current  Motor constant  Voltage constant, phase-to-phase  Phase-phase winding resistance  1.6 Ohm  Phase-phase winding inductance  Overall mass moment of inertia at power take-off  8.189 kgcm2	Corrosion resistance classification CRC	2 - Moderate corrosion stress
c UL us - Recognized (OL)  CE mark (see declaration of conformity)  to EU directive for EMC to EU directive low-voltage devices 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  Nominal voltage DC  Type of winding switch  Number of pole pairs  Standstill torque  11.08 Nm  Nominal torque  7.7 Nm  Peak torque  27 Nm  Nominal rotary speed  3,900 1/min  Max. speed  4,510 1/min  Nominal motor power  Nominal motor current  5.23 A  Peak current  4.4 A  Motor constant  Voltage constant, phase-to-phase Phase-phase winding resistance Phase-phase winding inductance  Overall mass moment of inertia at power take-off  8.189 kgcm2	PWIS conformity	VDMA24364-B2-L
CE mark (see declaration of conformity)  to EU directive for EMC to EU directive low-voltage devices 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  Nominal voltage DC  565 V  Type of winding switch  Star inside  Number of pole pairs  6  Standstill torque  11.08 Nm  Nominal torque  7.7 Nm  Peak torque  27 Nm  Nominal rotary speed  4,510 1/min  Nominal motor power  3,140 W  Nominal motor current  5.23 A  Peak current  4.4.7 Nm/A  Woltage constant, phase-to-phase Phase-phase winding resistance Phase-phase winding inductance  Overall mass moment of inertia at power take-off  8.189 kgcm2	Authorisation	RCM Mark
CE mark (see declaration of conformity)  to EU directive for EMC to EU directive low-voltage devices 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  Nominal voltage DC  565 V  Type of winding switch  Star inside  Number of pole pairs  6  Standstill torque  11.08 Nm  Nominal torque  7.7 Nm  Peak torque  27 Nm  Nominal rotary speed  4,510 1/min  Nominal motor power  3,140 W  Nominal motor current  5.23 A  Peak current  4.4.7 Nm/A  Woltage constant, phase-to-phase Phase-phase winding resistance Phase-phase winding inductance  Overall mass moment of inertia at power take-off  8.189 kgcm2		c UL us - Recognized (OL)
in accordance with EU RoHS directive  UKCA marking (see declaration of conformity)  To UK instructions for electrical equipment To UK instructions To UK RoHS instructions  Nominal voltage DC Type of winding switch Star inside  Number of pole pairs 6 Standstill torque 11.08 Nm Nominal torque 7.7 Nm Peak torque 27 Nm Nominal rotary speed 3,900 1/min  Max. speed 4,510 1/min  Nominal motor power 3,140 W  Nominal motor current 5.23 A Peak current 4.47 Nm/A  Motor constant Voltage constant, phase-to-phase Phase-phase winding resistance Phase-phase winding inductance Overall mass moment of inertia at power take-off  To UK instructions for electrical equipment To UK instructions for EMC To UK ROHS To UK	CE mark (see declaration of conformity)	
UKCA marking (see declaration of conformity)  To UK instructions for electrical equipment To UK instructions  Nominal voltage DC  Type of winding switch  Number of pole pairs  6  Standstill torque  11.08 Nm  Nominal torque  7.7 Nm  Peak torque  27 Nm  Nominal rotary speed  3,900 1/min  Max. speed  4,510 1/min  Nominal motor power  Nominal motor current  5.23 A  Peak current  Motor constant  Voltage constant, phase-to-phase  Phase-phase winding resistance  Phase-phase winding inductance  Overall mass moment of inertia at power take-off  8.189 kgcm2	, , , , , , , , , , , , , , , , , , , ,	to EU directive low-voltage devices
To UK instructions for EMC To UK ROHS instructions  Nominal voltage DC  565 V  Type of winding switch  Star inside  Number of pole pairs  6  Standstill torque  11.08 Nm  Nominal torque  7.7 Nm  Peak torque  27 Nm  Nominal rotary speed  3,900 1/min  Max. speed  4,510 1/min  Nominal motor power  3,140 W  Nominal motor current  5.23 A  Peak current  Motor constant  Voltage constant, phase-to-phase  Phase-phase winding resistance  Phase-phase winding inductance  9.01 mH  Overall mass moment of inertia at power take-off  8.189 kgcm2		
To UK instructions for EMC To UK ROHS instructions  Nominal voltage DC  565 V  Type of winding switch  Star inside  Number of pole pairs  6  Standstill torque  11.08 Nm  Nominal torque  7.7 Nm  Peak torque  27 Nm  Nominal rotary speed  3,900 1/min  Max. speed  4,510 1/min  Nominal motor power  3,140 W  Nominal motor current  5.23 A  Peak current  Motor constant  Voltage constant, phase-to-phase  Phase-phase winding resistance  Phase-phase winding inductance  9.01 mH  Overall mass moment of inertia at power take-off  8.189 kgcm2	UKCA marking (see declaration of conformity)	To UK instructions for electrical equipment
Nominal voltage DC Type of winding switch Star inside Number of pole pairs 6 Standstill torque 11.08 Nm Nominal torque 7.7 Nm Peak torque 27 Nm Nominal rotary speed 3,900 1/min Max. speed 4,510 1/min Nominal motor power 3,140 W Nominal motor current 5.23 A Peak current 24.4 A Motor constant 1.47 Nm/A Voltage constant, phase-to-phase Phase-phase winding resistance Phase-phase winding inductance 9.01 mH Overall mass moment of inertia at power take-off 8.189 kgcm2	one thanking (see decidration of comorning)	· ·
Nominal voltage DC Type of winding switch Star inside Number of pole pairs 6 Standstill torque 11.08 Nm Nominal torque 7.7 Nm Peak torque 27 Nm Nominal rotary speed 3,900 1/min Max. speed 4,510 1/min Nominal motor power 3,140 W Nominal motor current 5.23 A Peak current 24.4 A Motor constant 1.47 Nm/A Voltage constant, phase-to-phase Phase-phase winding resistance Phase-phase winding inductance 9.01 mH Overall mass moment of inertia at power take-off 8.189 kgcm2		To UK RoHS instructions
Type of winding switch  Number of pole pairs  6  Standstill torque  11.08 Nm  Nominal torque  7.7 Nm  Peak torque  27 Nm  Nominal rotary speed  3,900 1/min  Max. speed  4,510 1/min  Nominal motor power  3,140 W  Nominal motor current  5.23 A  Peak current  24.4 A  Motor constant  Voltage constant, phase-to-phase  Phase-phase winding resistance  Phase-phase winding inductance  Overall mass moment of inertia at power take-off  8.189 kgcm2	Nominal voltage DC	565 V
Number of pole pairs 6 Standstill torque 11.08 Nm Nominal torque 7.7 Nm Peak torque 27 Nm Nominal rotary speed 3,900 1/min Max. speed 4,510 1/min Nominal motor power 3,140 W Nominal motor current 5.23 A Peak current 24.4 A Motor constant 1.47 Nm/A Voltage constant, phase-to-phase 88.71 mVmin Phase-phase winding resistance 1.6 Ohm Phase-phase winding inductance 9.01 mH Overall mass moment of inertia at power take-off 8.189 kgcm2	9	Star inside
Standstill torque 11.08 Nm Nominal torque 7.7 Nm Peak torque 27 Nm Nominal rotary speed 3,900 1/min Max. speed 4,510 1/min Nominal motor power 3,140 W Nominal motor current 5.23 A Peak current 24.4 A Motor constant 1.47 Nm/A Voltage constant, phase-to-phase 88.71 mVmin Phase-phase winding resistance 1.6 Ohm Phase-phase winding inductance 9.01 mH Overall mass moment of inertia at power take-off 8.189 kgcm2		
Nominal torque 7.7 Nm  Peak torque 27 Nm  Nominal rotary speed 3,900 1/min  Max. speed 4,510 1/min  Nominal motor power 3,140 W  Nominal motor current 5.23 A  Peak current 24.4 A  Motor constant 1.47 Nm/A  Voltage constant, phase-to-phase 88.71 mVmin  Phase-phase winding resistance 1.6 Ohm  Phase-phase winding inductance 9.01 mH  Overall mass moment of inertia at power take-off 8.189 kgcm2		
Peak torque 27 Nm Nominal rotary speed 3,900 1/min Max. speed 4,510 1/min Nominal motor power 3,140 W Nominal motor current 5.23 A Peak current 24.4 A Motor constant 1.47 Nm/A Voltage constant, phase-to-phase 88.71 mVmin Phase-phase winding resistance 1.6 Ohm Phase-phase winding inductance 9.01 mH Overall mass moment of inertia at power take-off 8.189 kgcm2	'	
Nominal rotary speed 3,900 1/min  Max. speed 4,510 1/min  Nominal motor power 3,140 W  Nominal motor current 5.23 A  Peak current 24.4 A  Motor constant 1.47 Nm/A  Voltage constant, phase-to-phase 88.71 mVmin  Phase-phase winding resistance 1.6 0hm  Phase-phase winding inductance 9.01 mH  Overall mass moment of inertia at power take-off 8.189 kgcm2	,	
Max. speed 4,510 1/min  Nominal motor power 3,140 W  Nominal motor current 5.23 A  Peak current 24.4 A  Motor constant 1.47 Nm/A  Voltage constant, phase-to-phase 88.71 mVmin  Phase-phase winding resistance 1.6 Ohm  Phase-phase winding inductance 9.01 mH  Overall mass moment of inertia at power take-off 8.189 kgcm2	'	
Nominal motor power  Nominal motor current  5.23 A  Peak current  24.4 A  Motor constant  1.47 Nm/A  Voltage constant, phase-to-phase  88.71 mVmin  Phase-phase winding resistance  1.6 Ohm  Phase-phase winding inductance  9.01 mH  Overall mass moment of inertia at power take-off  8.189 kgcm2		· · ·
Nominal motor current  5.23 A  Peak current  24.4 A  Motor constant  1.47 Nm/A  Voltage constant, phase-to-phase  88.71 mVmin  Phase-phase winding resistance  1.6 Ohm  Phase-phase winding inductance  9.01 mH  Overall mass moment of inertia at power take-off  8.189 kgcm2	'	
Motor constant  1.47 Nm/A  Voltage constant, phase-to-phase  88.71 mVmin  Phase-phase winding resistance  1.6 Ohm  Phase-phase winding inductance  9.01 mH  Overall mass moment of inertia at power take-off  8.189 kgcm2	,	
Motor constant     1.47 Nm/A       Voltage constant, phase-to-phase     88.71 mVmin       Phase-phase winding resistance     1.6 Ohm       Phase-phase winding inductance     9.01 mH       Overall mass moment of inertia at power take-off     8.189 kgcm2	Peak current	24.4 A
Voltage constant, phase-to-phase  Phase-phase winding resistance  Phase-phase winding inductance  Phase-phase winding inductance  9.01 mH  Overall mass moment of inertia at power take-off  8.189 kgcm2	Motor constant	
Phase-phase winding resistance 1.6 Ohm Phase-phase winding inductance 9.01 mH Overall mass moment of inertia at power take-off 8.189 kgcm2		· · · · · · · · · · · · · · · · · · ·
Phase-phase winding inductance 9.01 mH  Overall mass moment of inertia at power take-off 8.189 kgcm2	- '	
Overall mass moment of inertia at power take-off 8.189 kgcm2		
, g		
	Product weight	9,600 g
Permissible axial shaft load 200 N	<u> </u>	
Permissible radial shaft load 780 N		
Rotor position sensor Absolute single turn encoder		, , , , , , , , , , , , , , , , , , ,
Rotary position encoder interface EnDat 22	1	
Rotary position encoder measuring principle Inductive	* '	
Rotor position encoder resolution 18 Bit		
MTTF, subcomponent 76 years, rotary position encoder	1	
MTTFd, subcomponent 152 years, rotary position encoder	·	