



## MAC800-D5

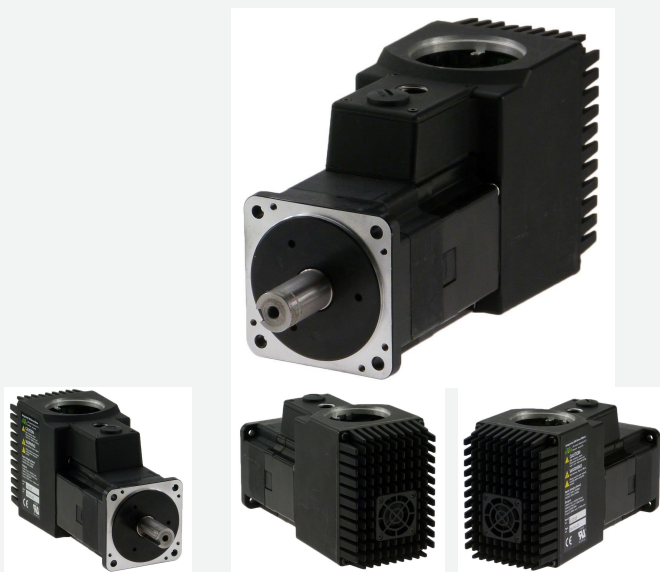
Int.ServoAC 746WS1 2.38Nm IP55, brk

MAC motor® is a series of integrated (all-in-one) servo motors with shaft power from 46 W to 4500 W. +400 W and new F-series (50..140 W) are programmable through ePLC (embedded-PLC). Choose between a large number of control modules.

Options include:

- Absolute Multiturn Encoder (incremental encoder is standard)
- Built-in Brake or Brake module (MABxx)
- Ethernet module w/built-in Switch for easy daisy-chaining and all protocols (Profinet, EtherNet/IP, EtherCAT, SERCOS, ModbusTCP/UDP, Powerlink)
- Wireless modules are also available: WLAN or BlueTooth
- CANopen, Devicenet or Profibus or ePLC modules
- Serial communication modules, RS232 and/or RS485
- High IP versions are also available (IP 65..66..67)
- Food or Medico types in Stainless Steel IP69K

Unique Ethernet functionality: use MacTalk® (PC software) to change freely between all the different Ethernet protocols, you don't need several different types on stock – ONE is enough.



### General information

<b>Description</b>	Int.ServoAC 746WS1 2.38Nm IP55, brk , WxHxL: 80x120x209 mm. 3000 RPM. 100% Duty Cycle. 2.38 Nm RMS / 6.8 Nm Peak, IP55 w/brake, Incremental Encoder: 8000 CPR, Color: Black, Alias: MAC800-D5-BAAJ		
<b>Manufacture</b>	JVL	<b>Motor type</b>	Integr. AC-servo - Rotating
<b>Motor power [W]</b>	746	<b>Power Peak [W]</b>	2238
<b>Duty Cycle</b>	S1	<b>Max Duty Cycle [%]</b>	100
<b>Continuous Torque</b>	2.38	<b>Peak torque [Nm]</b>	6.8
<b>Main supply [V]</b>	115, 230	<b>Voltage type - Main</b>	AC
<b>Speed [Rpm]</b>	3000	<b>Connectivity: Without module</b>	RS232 - 5VDC, Modbus RTU
<b>Encoder type</b>	Incr. Encoder	<b>Encoder [Counts/rev]</b>	8000
<b>Integrated PLC</b>	Yes	<b>Brake</b>	Internal brake
<b>STO connector</b>	No	<b>Fan mounted</b>	Yes
<b>Integrated gear</b>	No	<b>Gear ratio</b>	-
<b>Approval - UL</b>	Approved	<b>Approval TÜV - STO</b>	No
<b>PLC no. of AIN</b>	2	<b>PLC no. of DI</b>	-
<b>PLC no. of DIO</b>	-	<b>PLC no. of DO</b>	2



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### General information

<b>Multifunction IOs</b>	2		
<b>Flange size</b>	80x80	<b>Protection house</b>	IP55
<b>Shaft size - Front [mm]</b>	19.00mm	<b>Protection shaft</b>	IP55
<b>Color</b>	Black	<b>Paint type</b>	
<b>Ambient Temperature range:</b>		<b>Max. Amb. Temperature range - Torque derating:</b>	
<b>Maximum Installation Altitude:</b>		<b>Max. Installation Altitude - Power Derating every 1000m:</b>	
<b>Weight net [kg]</b>	3.70	<b>Weight gross [kg]</b>	4.01
<b>Tariff no</b>	85015100	<b>Country Of Origin</b>	DK



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### Mechanical information

<b>Motor type</b>	Integr. AC-servo - Rotating	<b>Color</b>	Black
<b>Rotor inertia [kgcm<sup>2</sup>]</b>	1.13	<b>Max inertia factor</b>	20
<b>Encoder type</b>	Incr. Encoder	<b>Encoder [Counts/rev]</b>	8000
<b>Precision Motor - Absolute [Deg -/+]</b>	0.04	<b>Precision Motor - Max Load [Deg -/+]</b>	
<b>Precision Motor - Repeatability [Deg -/+]</b>	0.04		
<b>Brake</b>	Internal brake	<b>Brake - Go ON time [ms]</b>	16
<b>Brake Holding torque [Nm]</b>	3.25	<b>Brake - Go OFF time [ms]</b>	44
<b>Radial load [N]</b>	180	<b>Radial load distance [mm]</b>	20
<b>Axial load [N]</b>	110		
<b>Axial play [mm]</b>	xxx	<b>Axial play force [N]</b>	xxx
<b>Front bearing type</b>	xxx	<b>Rear bearing type</b>	xxx
<b>Integrated gear</b>	No	<b>Gear ratio</b>	-
<b>Gear efficiency [%]</b>	-	<b>Gear backlash [ArcMin]</b>	-
<b>Motor length [mm]</b>	209	<b>Motor width [mm]</b>	84.0
<b>Motor height [mm]</b>	120.0	<b>Protection house</b>	IP55
<b>Customer Sealing</b>	Standard		
<b>Flange size</b>	80x80	<b>Mounting holes front [mm]</b>	5.5
<b>Motor diameter center front [mm]</b>	70.0	<b>Bolt circle diameter front [mm]</b>	90.0
<b>Flange material</b>		<b>Flange Thickness [mm]</b>	
<b>Shaft Key included</b>	-	<b>Shaft Key Dimension</b>	6x6x30
<b>Shaft size - Front [mm]</b>	19.00mm	<b>Protection shaft</b>	IP55
<b>Shaft length Front [mm]</b>	40.0	<b>Shaft material</b>	Steel
<b>Approval - ROHS-3</b>	Yes	<b>Approval - UL</b>	Approved
<b>Approval TÜV - STO</b>	No	<b>Approval - ATEX</b>	No
<b>CAD 2D [PDF]</b>	Download	<b>CAD 3D [STEP]</b>	Download
<b>CAD 2D [DWG]</b>	No	<b>CAD 3D [DWG]</b>	No



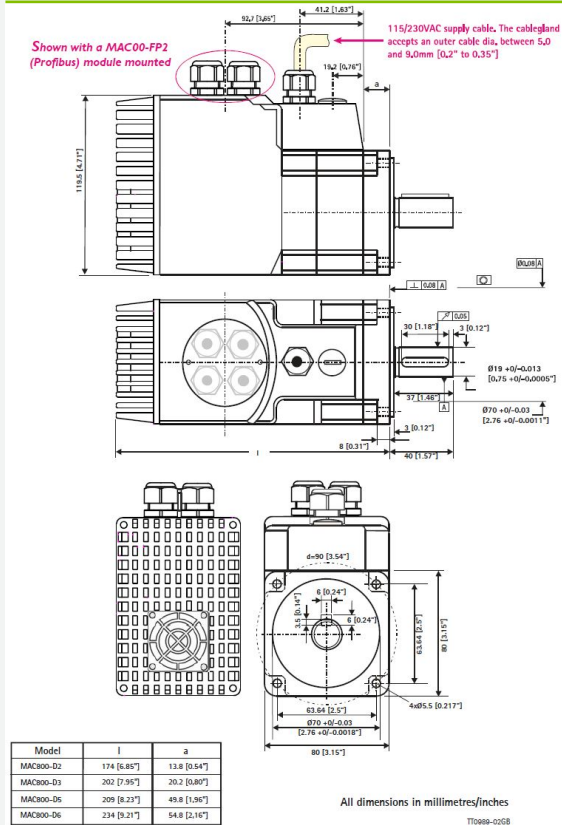
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### Mechanical information

<b>CAD 3D [EASM]</b>	No	<b>CAD 3D [IGES]</b>	No
<b>Datasheet - pdf</b>	Yes	<b>User Manual</b>	Download
<b>REACH SVHC document</b>	Download	<b>Low voltage Directive</b>	LVD conformity with EU standard: EN 61800-3

### No Dual Use



### Shaft Seal

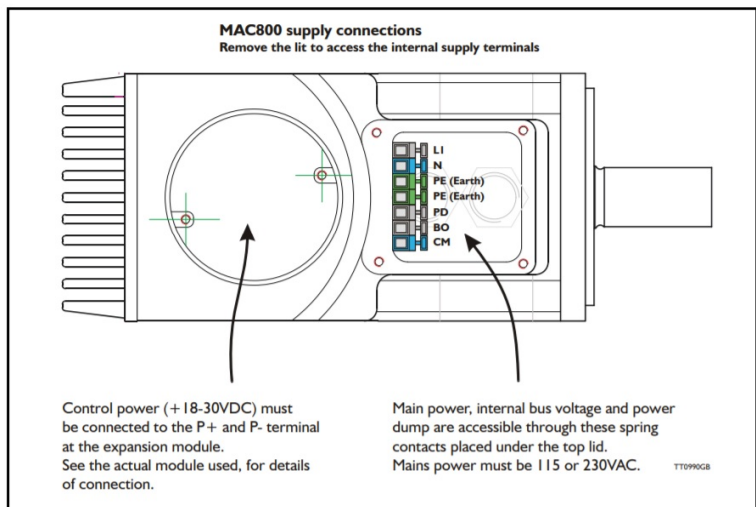


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### Connector information

#### Motor connectors



<b>Expansion connector</b>	Generation 1 and 2		
<b>PLC no. of DI</b>	-	<b>PLC no. of DO</b>	2
<b>PLC no. of DIO</b>	-	<b>PLC no. of AIN</b>	2
<b>Multifunction IOs</b>	2		
<b>Connector Power</b>	PG12 - Internal terminal	<b>Connector Power Supplier</b>	
<b>Connector Power direction</b>	Straight		
<b>Connector PDO</b>	PG12 - Internal terminal	<b>Connector PDO Supplier</b>	
<b>Connector STO</b>	No		
<b>Module connections</b>	Here - Click for module cable connections		

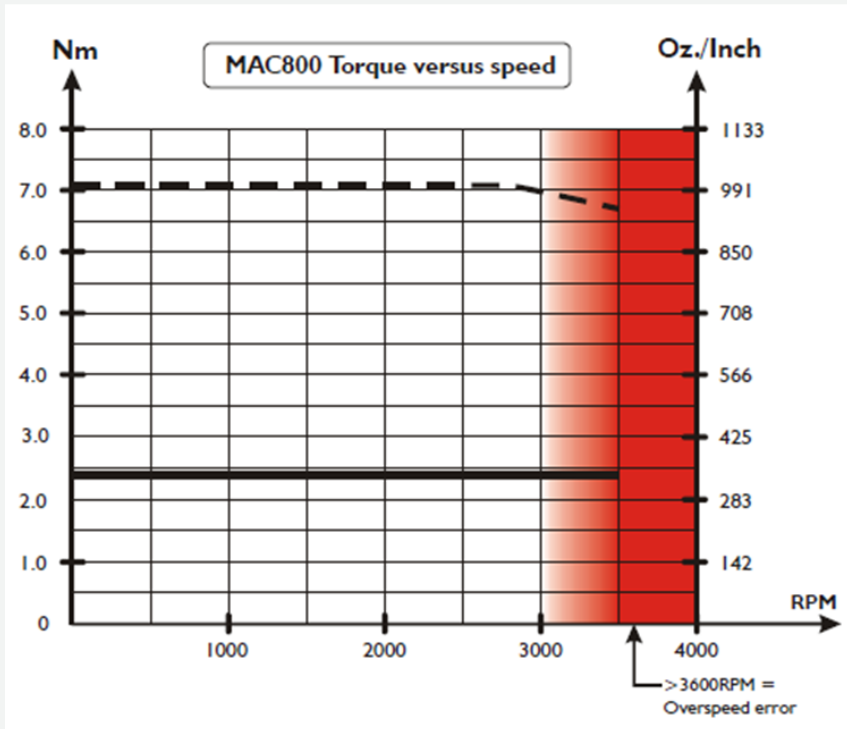


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### Torque, force and Power information

<b>RMS torque [Nm]</b>	2.38	<b>Peak torque [Nm]</b>	6.8
<b>Supply Volt 1 [V]</b>	1x115	<b>Supply Volt 2 [V]</b>	1x230
<b>Supply Volt 3 [V]</b>		<b>Supply Volt 4 [V]</b>	-





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**Electrical information**

<b>Control voltage (CVI/O+) [VDC]</b>	18-28	<b>Control Voltage (CVI) Min-Max [VDC]</b>	18-30
<b>Main supply [V]</b>	115, 230	<b>Main supply Min-Max [V]</b>	90-260
<b>Voltage type - Main</b>	AC	<b>Main Voltage possible</b>	1x115VAC, 1x230VAC
<b>PLC no. of DI</b>	-	<b>PLC no. of DO</b>	2
<b>PLC no. of DIO</b>	-		
<b>PLC no. of AIN</b>	2	<b>Analogue voltage</b>	-/+10VDC, -/+11bit
<b>Multifunction IOs</b>	2		
<b>MTBF 30% [Year]</b>	-	<b>MTBF 100% [Year]</b>	-
<b>Internal Power-Dump Resistance [Ohm]</b>	68	<b>Internal Power-Dump Power [W]</b>	9
<b>PD connection - Int/Ext</b>	Int/Ext PD in Parallel		
<b>External Power-Dump Resistance Minimum value [Ohm]</b>	33	<b>External Power-Dump Max Current [A]</b>	100
<b>Inrush current -Main max [A]</b>		<b>Inrush special</b>	No
<b>Recommended fuse</b>	115VAC: FRN-R-15 Cooper Bussmann inc. 230VAC: T10A@230VAC type gG, Do or Dz.	<b>P- isolated from Earth ( Low Voltage ground (P-) isolated from housing)</b>	No
<b>Resistance [Ohm]</b>		<b>Induction [mH]</b>	
<b>Analogue Output [V]</b>		<b>Analogue Output [mA]</b>	
<b>Analogue Isolated Output Voltage [V]</b>			



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### Communication information

**Software** MacTalk

**Connectivity:** RS232 - 5VDC, Modbus RTU **e-PLC Files**

**Without module**

**Connectivity:** **Gen.** Yes

**1 modules**

**Connectivity:** **Gen.** Yes

**2 modules**





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## MAC800-D5

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### Cable information

Item number	Mount on	Cable con 1 +Con 1 angle	Cable application	Wires no totally	Cable length [m]
Item description		Cable con 2 +Con 2 angle	Cable flexibilty	Wire [mm2]	Connector 1 LED