

# 500 kW / 700 hp Power Module



250 kW to 500 kW / 400 to 700 hp  
Up to 865 A

380 to 480 VAC (± 10%)

500 to 575 VAC (± 10%)

500 to 690 VAC (± 10%)

### Drive Highlights

- A single installer can handle wiring and connection using comprehensive accessories.
- Under 30 minutes to replace the drive.
- Factory-tested spare parts (sub-assemblies) can be exchanged on site without returning the drive to base.
- Wider front face design and lower centre of gravity provide greater physical stability and safety during installation.
- Always smaller than an existing drive when retrofitting, so will always fit space available.
- Fixed lifting points on the chassis (no additional brackets required) for safe handling.
- No additional chokes are required for many of the applications using single modules.
- Internal 125 kW (175 hp) brake chopper included as standard.

## Drive variants

Available with a control stage to suit any application (ordered separately):

- Industrial automation systems based upon induction or permanent magnet motors, where control dynamics are key.
- HVAC/R and pumping systems where dedicated drive features provide overall system control.
- 500 kW / 700 hp supports the latest high-efficiency motors to maximise return on investment and minimise impact on the environment.

Select from:

Unidrive M600 & M700x, Pump Drive F600 or HVAC Drive H300

M600	Open-loop high performance	<ul style="list-style-type: none"> <li>• Modbus RTU over RS485 communications</li> <li>• 1 x Safe Torque Off (STO) certified to SIL3/PLe</li> <li>• Analogue and digital I/O</li> </ul>
M700	Ethernet	<ul style="list-style-type: none"> <li>• Onboard real-time multi-protocol Ethernet</li> <li>• 1 x Safe Torque Off (STO) certified to SIL3/PLe</li> <li>• Analogue and digital I/O</li> </ul>
M701	RS-485 (Unidrive SP replacement)	<ul style="list-style-type: none"> <li>• Designed to match Control Techniques' highly popular Unidrive SP feature-set.</li> <li>• Modbus RTU over RS485 communications</li> <li>• 1 x STO certified to SIL3/PLe</li> <li>• Analogue and digital I/O</li> </ul>
M702	Safety	<ul style="list-style-type: none"> <li>• Onboard real-time multi-protocol Ethernet</li> <li>• 2 x STO certified to SIL3/ PLe</li> <li>• Digital I/O - If analogue I/O is required, this can be provided by an SI-I/O option module</li> </ul>
F600	Pumping	<ul style="list-style-type: none"> <li>• Dedicated, specialist pump drive delivers precise, dependable flow control</li> <li>• Comprehensive pump protection and energy saving features significantly reduce total cost of ownership</li> </ul>
H300	HVAC	<ul style="list-style-type: none"> <li>• Dedicated, specialist HVAC drive optimised for fan and compressor applications</li> <li>• Modbus RTU and BACnet MS/TP communications provide seamless integration with Building Automation Systems</li> </ul>

Please refer to the individual product data sheets for key information

### Output frequency

500 kW / 700 hp Power Modules have a maximum output frequency of 599 Hz and are, therefore, not subject to special export controls.

# Dimensions and weights

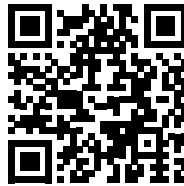
Width	Height	Depth
295mm (11.61 in)	1750mm (68.90 in)	526mm (20.71 in)
AC to AC ('T' type)		DC to AC ('D' type)
130 kg (287 lb)		113 kg (249 lb)



## Documentation & Downloads

Product documentation and PC tools available for download from:

[www.controltechniques.com/support](http://www.controltechniques.com/support)



# Drive ratings and ordering information

Model	Normal Duty			Heavy Duty			
	Maximum Continuous Output Current	Nominal Power	Nominal Power	Maximum Continuous Output Current	Nominal Power	Nominal Power	
	A	kW	hp	A	kW	hp	
400 V	M000-12404800	608	315	500	480	250	400
	M000-12405660	660	355	550	566	315	450
	M000-12406600	755	400	650	660 <sup>2</sup>	355	550
	M000-12407200	865 <sup>1</sup>	500	700	720 <sup>3</sup>	400	600
575 V	M000-12503150	376	250	350	315	250	350
	M000-12503600	428	300	400	360	250	350
	M000-12504100	480	330	450	410	300	400
	M000-12504600	532	370	500	460	330	450
690 V	M000-12603150	376	355	450	315	280	400
	M000-12603600	428	400	500	360	355	450
	M000-12604100	480	450	600	410	400	500
	M000-12604600	532	500	650	460	450	600

Order Code Finish      Format  
 ...TU0100AB100      AC to AC  
 ...DU0100AB100      DC to AC

Note<sup>1</sup>: 110 % Overload at 30°C and below and No Overload above that.  
 Note<sup>2</sup>: 140 % Overload at 35°C and below and 125% above that.  
 Note<sup>3</sup>: 140 % Overload at 30°C and below and 125% above that.



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