



## 600 - 1500W 1U Modular power supply



Features	Benefits
• Extremely low audible noise fan	Enhanced patient / user experience
• BF ready medical isolation (MOPP)	Eases design into systems (including BF)
• Up to 13 outputs	Eliminates need for additional supplies
• PMBus™ communication option	Remote monitoring and control
• 7 year warranty	Low cost of ownership

Input	MU4	MU6
Output power 85-264Vac (derate by 1%/Vac below 100Vac)	600W	1200W
Output power 180-264Vac	800W	1500W
Frequency	47 - 63 Hz (440Hz with reduced PFC)	
Input fuses	20A / 250Vac HBC Fast acting (not user accessible) in both Live and Neutral lines (single fusing optional)	
Inrush current	<45A at 25°C and 264Vac (cold start)	
Leakage current	300µA max	
Touch current	<100µA	
Power factor	> 0.9 (at 230Vac, 100% load)	

Isolation		
Input to output / signals	Reinforced	2 x MOPPs (3rd edition 60601) 4kVac, 5.7kVdc type tested to 4kVac (equivalent to 5.7kVdc), production tested to 4.3kVdc.
Input to earth	Basic	1 x MOPP, 1.5kVac
Output / signals to earth	Basic	1 x MOPP, 1.5kVac
Output / signals to output / signals	Basic	200Vdc (1 x MOPP between modules is available, contact sales for details)

### How To Create A Product Description

The extensive range of output modules and options make it possible to achieve almost any combination of Volts and Amps. You can create your own MU configuration online at <https://config.emea.tdk-lambda.com/>. This method checks your configuration and offers the optimum solution. Alternatively, you can do this manually by using the guide below.

- Calculate total output power to select the appropriate converter, then select required Cooling, Input Connection, Input Fuse, Leakage Current and Controls/Signals from the following table:
- Select Output Modules using the output voltages tables and the module specifications.
- Contact TDK-Lambda to validate configuration and issue a part number.

<b>Converter</b>	<b>MU4</b>	800W high line
	<b>MU6</b>	1500W high line

<b>Cooling</b>	<b>F</b>	Variable speed Forward air - standard
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<b>Input Connection</b>	<b>S</b>	Screw
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<b>Input fuse</b>	<b>D</b>	Dual AC fuses
	<b>E</b>	Single AC fuse in Live line (contact sales for details)

<b>Leakage Current</b> (max at 264Vac, 63Hz)	<b>L</b>	300µA
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<b>Standby / Signals</b>	<b>blank</b>	None
	<b>E5H</b>	5V / 2A, AC good + Enable
	<b>T5H</b>	5V / 2A, AC good + Inhibit
	<b>E12H</b>	12V / 1A, AC good + Enable
	<b>T12H</b>	12V / 1A, AC good + Inhibit
	<b>Q5H0000</b>	5V / 2A, see PMBus™ app note

see specification page for details

<b>MU4</b>	<b>F</b>	<b>S</b>	<b>D</b>	<b>L</b>	<b>T5H</b>
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<b>Possible Outputs</b> - see individual module data for full specifications						
Module name	Slots used	Output voltage range			Maximum Output Current	Maximum Output Power
SB	1	3.3V	-	6V	30A	150W
ZC	2	3.3V	-	6V	54A	270W
DM (ch1 or ch2)	1 of 2 outputs in single slot	5V	-	15V	8A	96W
SB	1	6V	-	15V	20A	240W
YC	2	6.6V	-	12V	30A	300W
YC	2	12V	-	30V	20A	480W
SC	2	12V	-	13.2V	42A	504W
ZF	4	12V	-	12.8V	76A	972.8W
DM (ch1 or ch2)	1 of 2 outputs in single slot	15V	-	30V	4A	96W
SB	1	15V	-	30V	10A	240W
SC	2	24V	-	26.4V	21A	504W
YF	4	24V	-	26.4V	42A	1008W
SB	1	30V	-	52V	5A	240W
YC	2	30V	-	60V	10A	480W
SC	2	48V	-	52.8V	10.5A	504W
YF	4	48V	-	52.8V	21A	1008W
YC	2	60V	-	104V	5A	480W
YF	4	96V	-	105.6V	10.5A	1008W

Output Specification		
Turn on time	2s max	at 85Vac (180Vac for 1500W) and 100% rated output power
Efficiency	up to 94%	230Vac, 100% rated power, 25°C, configuration dependent
Hold up	12ms min 10ms min	at lowline (for 30-52Vdc SB module and 60 -104Vdc YC module, 9ms min) at highline (for 30-52Vdc SB module and 60 -104Vdc YC module, 7ms min)
Over temperature protection	Yes	converter protection shuts down all outputs (except standby supplies) and fan, auto restarts. Shutdown temperature varies according to ambient, output power and input voltage.

Environment	
Temperature	-20°C to 70°C operational, -40°C to 70°C storage.
Derating	50°C to 70°C derate total output power and each output current by 2.5% per °C
Low temperature startup	-40°C, all specification parameters may not be achieved
Audible noise	As low as 36dBA, 25°C, 115Vac/240Vac and 80% unit power (fan speed increases with load / temperature)
Humidity	5 - 95% RH non condensing
Shock	±3 x 30g shocks in each plane, total 18 shocks (11ms (+/-0.5msec), half sine) Conforms to EN60068-2-27, EN60068-2-47, IEC68-2-27, IEC68-2-47, JIS C0041-1987. Conforms to MIL-STD-810G, Method 516.6, Pro IV
Vibration	Single axis 10 - 500 Hz at 2g (sweep and endurance at resonance) in all 3 planes Conforms to EN60068-2-6, IEC68-2-6 Conforms to MIL-STD-810G, Method 514.6, Pro I
Altitude	5000 metres operational, 5000 metres storage/transportation
Pollution	Degree 2, Material group IIIb
IP Rating	IPX0

Emissions EN61000-6-3:2021, EN60601-1-2:2015+A1:2021 - see application notes for best installation practice		
Radiated electric field	EN55011, EN55032	(as per CISPR.11/32) Class B, FCC47 part 15 subpart B - 'L' leakage current variants
Conducted emissions	EN55011, EN55032	(as per CISPR.11/32) Class B, FCC47 part 15 subpart B - 'L' leakage current variants
Conducted harmonics	EN61000-3-2	Class A and Class C
Flicker	EN61000-3-3	Compliant - d <sub>max</sub> only

Immunity EN61000-6-2:2019, EN60601-1-2:2015+A1:2021 - see application notes for best installation practice				Criteria
Electrostatic discharge	EN61000-4-2	Level 4	F type cooling only	A
Electromagnetic field	EN61000-4-3	Level 3		A
Fast / burst transient	EN61000-4-4	Level 4	Tested at 5kHz and 100kHz	A
Surge immunity	EN61000-4-5	Level 3		A
Conducted RF immunity	EN61000-4-6	Level 3		A
Power frequency magnetic field	EN61000-4-8	Level 4		A
Voltage dips, variations, interruptions	EN61000-4-11	Class 3	See EMC report for full details.	A/B
Voltage sags	Semi F-47	compliant	above 180Vac input	
Ring wave	EN61000-4-12	Level 3		A
Voltage fluctuations	EN61000-4-14	Class 3		A
Radiated Fields in Close Proximity	EN61000-4-39	N/A	EN 60601-1-2, parameters as defined in standard	A
Enclosure Port Immunity to RF wire-less communications equipment	EN 60601-1-2	N/A	EN 60601-1-2, parameters as defined in standard	A

Approvals / Accreditations	
IEC/EN 62368-1, UL62368-1 / CSA 22.2 No 62368-1	File E135494
IEC/EN 60601-1, UL/CSA 60601-1, ANSI/AAMI ES60601-1, CAN/CSA-C22.2 No 60601-1	File E349607
IEC/EN 61010-1, UL61010-1	File E331788
CE Mark (EN62368-1)	Low Voltage Directive (LVD), electromagnetic compatibility (EMC) and Restriction of Hazardous Substances (RoHS)
UKCA (EN62368-1)	Electrical Equipment (Safety) Regulations, electromagnetic compatibility (EMC) and Restriction of Hazardous Substances (RoHS)
CB certificate and Report available on request	
Designed and manufactured under the control of ISO9001 and ISO13485 (including risk management).	

**Standby / Signals**

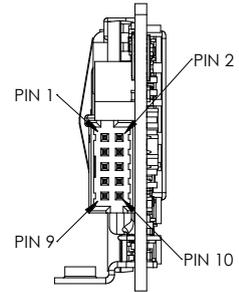
Maximum power per channel	See table below
Available signals (Exx or Txx type)	PSU inhibit (Txx type) or enable (Exx type), AC Good
Available signals (Qxx type)	PMBus™ control of power supply fan speed and fail warning Serial number, date of manufacture, run time, on/off power cycles For further details, see the product range application notes, PMBus™ section

**Available Output Voltages (at PSU signal connector)**

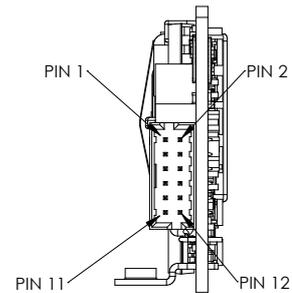
Option type	Standby 1			PSU on/off
	V	Max Current	Power	
E5H	5V	2A	10W	Enable
T5H	5V	2A	10W	Inhibit
E12H	12V	1A	12W	Enable
T12H	12V	1A	12W	Inhibit
Q5H0000	5V	2A	10W	see PMBus™ application note

Conector information	
10 way housing	Molex 51110-1060
12way housing	Molex 51110-1260
Crimp terminal	Molex 50394

Pin	Txx or Exx option
1	Standby +
2	Standby -
3	Do not connect
4	Do not connect
5	PSU on/off+
6	PSU on/off-
7	AC fail Out
8	AC fail Rtn
9	Fan fail Out
10	Fan fail Rtn



Pin	Q5Hxxxx option
1	Standby +
2	Standby -
3	Do not connect
4	Fan fail
5	Address 0
6	Address 1
7	Address 2
8	Address 3
9	SCL - Clock
10	SDA - Data
11	Control line in
12	GND



**Output Specification**

Rise time	<30ms	(with resistive load) to 90% of voltage, monotonic rise above 10%
Ripple and noise	<2%	pk-pk, using 20MHz bandwidth
Voltage setting accuracy	<3%	of set voltage
Remote sense	No	
Minimum load	0W	on any output
Temperature coefficient	0.02%	of rated voltage per °C
Load regulation	<1.0%	for 0-100% load change
Line regulation	<0.1%	for 90-264Vac input change
Cross regulation	<0.4%	for 100% load change on any output
Transient deviation	<5%	of set voltage for 25-50% load change
Recovery	1ms	for recovery to 1% or 100mV of set voltage
Over voltage protection	Yes	Latching, output shuts down, cycle ac to reset
Over current protection	Constant Current	Auto recovers
Short circuit protection	Constant Current	Auto recovers

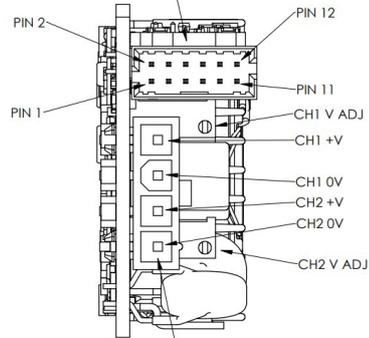
## DM Module - single slot width, 2 output channels

Maximum module power	192W
Available signals	Module good, module inhibit or enable, remote sense
Output - output isolation	100V

### AVAILABLE OUTPUT VOLTAGES (at PSU output terminals)

Channel 1 adjustment range (volts)	Channel 1 Current	Output Power	Channel 2 adjustment range (volts)	Channel 2 current	Output Power	Max Capacitive Load
5 - 15	8A	96W	5 - 15	8A	96W	500µF/A
15 - 30	4A	96W	15 - 30	4A	96W	500µF/A
5 - 15	8A	96W	15 - 30	4A	96W	500µF/A

HOUSING: MOLEX 51110-1260  
CRIMP TERMINAL: MOLEX 50394



Pin	Connection
1	Remote Sense + CH1
2	Remote Sense - CH1
3	Module good CH1 collector
4	Module good CH1 emitter
5	Module enable/inhibit CH1 anode
6	Module enable/inhibit CH1 cathode
7	Remote sense + CH2
8	Remote sense - CH2
9	Module good CH2 collector
10	Module good CH2 emitter
11	Module enable/inhibit CH2 anode
12	Module enable/inhibit CH2 cathode

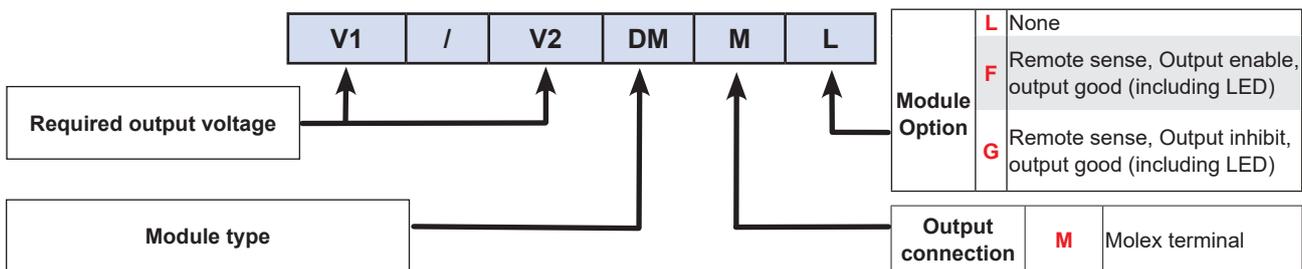
CONNECTOR: MOLEX 39303046  
MATES WITH: MOLEX 39014041  
CRIMP TERMINAL: MOLEX 457503111 (16 AWG) OR 457501111 (18 AWG) **Mini-Fit PLUS HCS**

### Output Specification

Rise time	<75ms	(with resistive load) to 90% of voltage, monotonic rise above 10%
Turn on overshoot	<5%	Load type dependent
Ripple and noise		pk-pk, using 20MHz bandwidth
0°C - 70°C, 0-100% load	<2%	
-20°C - 0°C, 0-100% load	<5%	
Voltage setting accuracy	<1%	of set voltage
Remote sense	Option	0.5V (voltage at the output terminals must remain within the adjustment range specified above)
Minimum load	0W	
Temperature coefficient	0.02%	of rated voltage per °C
Load regulation	1%	for 0-100% load change
Line regulation	0.1%	for 90-264Vac input change
Cross regulation	0.1%	(or 5mV, whichever is greater)
Transient deviation	<5%	of set voltage for 25% to 75% load change
Recovery	1ms	for recovery to 1% or 100mV of set voltage, 25-75% load step
Over voltage protection	Yes	Latching, tracking & fixed. Tracking: 110-130% Vout.
Over current protection	Hiccup	Auto recovers.
Short circuit protection	Yes	Indefinitely protected, see application notes for details
Over temperature protection	Yes	Non-latching. Primary protection on converter.

### How To Create A Product Description

Choose your required output voltage (from the table above)  
For example, if you need 6V / 8A and 18V / 4A, you would choose 6/18DMML as your required module.



**SB Module - single slot width, 1 output channel**

Maximum power per channel see table below

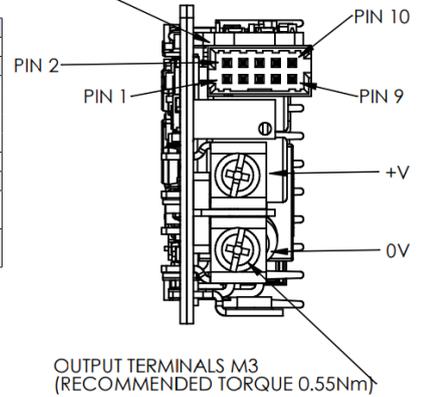
Available signals Remote sense, module good, module inhibit or enable (Note 1:)

HOUSING: MOLEX 51110-1060  
CRIMP TERMINAL: MOLEX 50394

AVAILABLE OUTPUT VOLTAGES (at PSU output terminals)					
Adjustment Range (Volts)		Current	Output power	Max Capacitive Load	
3.3	- 6.0	30A	150W	500µF/A	
6	- 15	20A	240W	500µF/A	
15	- 30	10A	240W	500µF/A	
30	- 52	5A	240W	200µF/A	

Note 1: Current share is only available on ZC module pair

Pin	Connection
1	Remote Sense +
2	Remote Sense -
3	Do not connect
4	
5	
6	
7	Module good collector
8	Module good emitter
9	Module enable/inhibit anode
10	Module enable/inhibit cathode



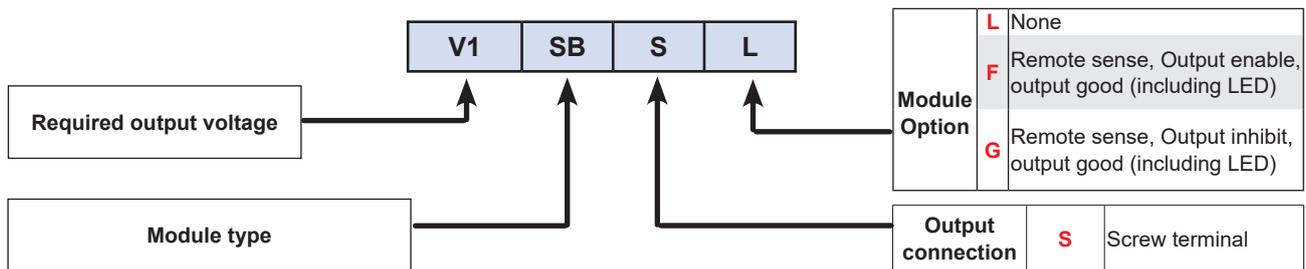
**Output Specification**

Rise time	<75ms	(with resistive load) to 90% of voltage, monotonic rise above 10%
Turn on overshoot	<5%	Load type dependent
Ripple and noise	max of	pk-pk, using 20MHz bandwidth
0°C - 70°C, >5% load	1% or 50mV	2% above 6V output
-20°C - 0°C, >5% load	2% or 100mV	2% above 6V output
≤5% load	4%	
Voltage setting accuracy	<1%	of set voltage
Remote sense	Option	0.5V (voltage at the output terminals must remain within the adjustment range specified above)
Minimum load	0W	
Temperature coefficient	0.02%	of rated voltage per °C
Load regulation	<1%	for 0-100% load change
Line regulation	<0.1%	for 90-264Vac input change
Cross regulation	0.1%	(5mV for outputs below 5V) for 100% load change on any output
Transient deviation	<5%	of set voltage for 25% to 75% load change 250mV for outputs below 5V
Recovery	1ms	for recovery to 1% or 100mV of set voltage (between 6V and 30V recovery is 1.5ms)
Over voltage protection	Yes	Latching, module shuts down, cycle ac to restart.
Over current protection	Hiccup	Auto recovers after removal of load
Short circuit protection	Yes	Indefinitely protected, see application notes for details
Over temperature protection	Yes	Module protection shuts down output, cycle ac to restart. Shutdown temperature varies according to ambient, output power and input voltage.

**How To Create A Product Description**

Choose your required output voltage (from the table above)

For example, if you need 12V / 20A with remote sense, you would choose **12SBSF** or **G** as your required module.



## SC Module - two slots width, 1 output channel

Maximum power per channel see table below

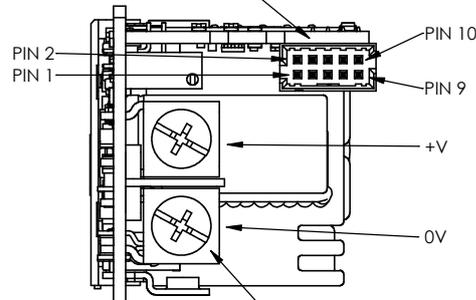
Available signals Module good, module inhibit or enable, remote sense

### AVAILABLE OUTPUT VOLTAGES (at PSU output terminals)

Adjustment Range (Volts)	Current	Output Power	Max Capacitive Load
12 - 13.2	42A	504W	1,000µF/A
24 - 26.4	21A	504W	750µF/A
48 - 52.8	10.5A	504W	250µF/A

HOUSING: MOLEX 51110-1060

CRIMP TERMINAL: MOLEX 50394



Pin	Connection
1	Remote Sense +
2	Remote Sense -
3	
4	Do not connect
5	
6	
7	Module good collector
8	Module good emitter
9	Module enable/inhibit anode
10	Module enable/inhibit cathode

OUTPUT TERMINALS M4 (RECOMMENDED TORQUE 1.2Nm)

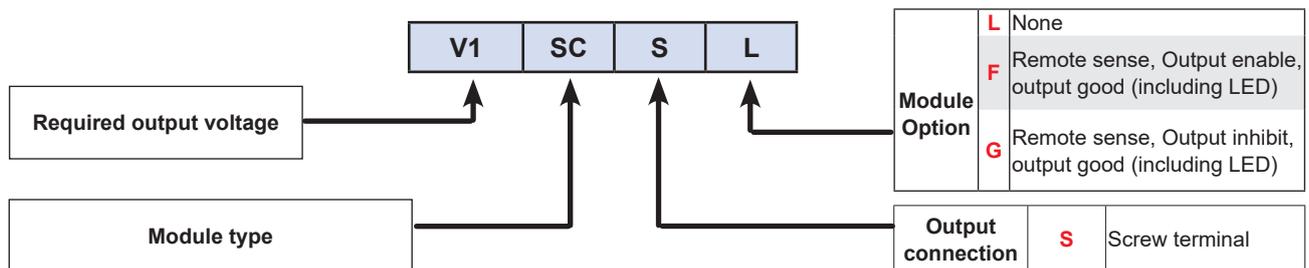
### Output Specification

Rise time	<75ms	(with resistive load) to 90% of voltage, monotonic rise above 10%
Turn on overshoot	<5%	Load type dependent
Ripple and noise		pk-pk, using 20MHz bandwidth
0°C - 70°C, 0-100% load	3%	or 100mV - whichever is greater
-20°C - 0°C, 0-100% load	3%	
Voltage setting accuracy	<1%	of set voltage
Remote sense	Option	0.5V (voltage at the output terminals must remain within the adjustment range specified above)
Minimum load	0W	
Temperature coefficient	0.016%	of rated voltage per °C
Load regulation	<1%	for 0-100% load change
Line regulation	<0.1%	for 90-264Vac input change
Cross regulation	<0.1%	(or 5mV, whichever is greater)
Transient deviation	<5%	of set voltage for 25% to 75% load change
Recovery	1ms	for recovery to 1% or 100mV of set voltage, 25-75% load step
Over voltage protection	Yes	Latching, module shuts down, cycle ac to restart.
Over current protection	Hiccup	Auto recovers
Short circuit protection	Yes	Indefinitely protected, see application notes for details
Over temperature protection	Yes	Latching, module protection shuts down output, cycle ac to restart. Shutdown temperature varies according to ambient, output power and input voltage.

### How To Create A Product Description

Choose your required output voltage (from the table above)

For example, if you need 25V / 20A with remote sense, you would choose **25SCSG** as your required module.

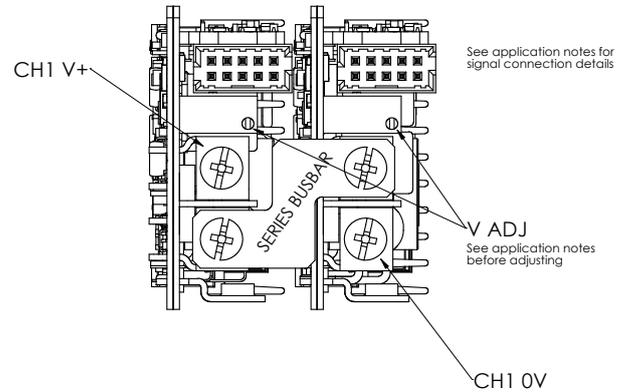


**YC Module - 2 slots width, 1 output channel**

Maximum module power	See table below
Available signals	Module good, module inhibit or enable, remote sense

**AVAILABLE OUTPUT VOLTAGES (at PSU output terminals)**

Adjustment range (volts)	Current	Output Power	Max Capacitive Load
6.6 - 12	30A	300W	1000µF/A
12 - 30	20A	480W	
30 - 60	10A	480W	
60 - 104	5A	480W	

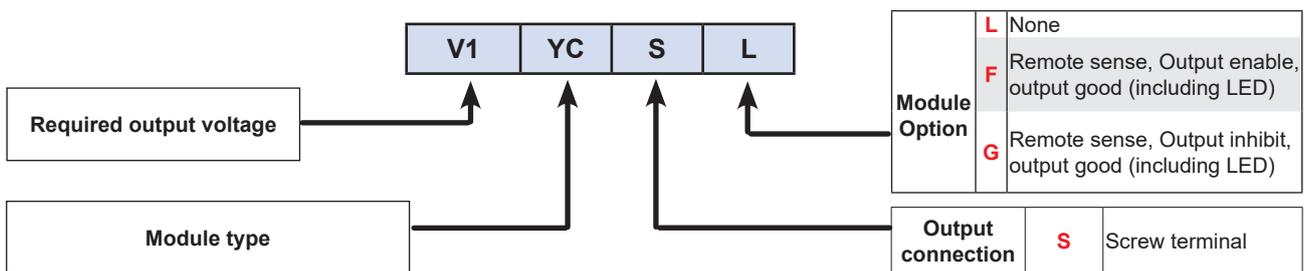


**Output Specification**

Rise time	<75ms	(with resistive load) to 90% of voltage, monotonic rise above 10%
Turn on overshoot	<5%	Load type dependent
Ripple and noise	max of	pk-pk, using 20MHz bandwidth
0°C - 70°C, >5% load	1% or 50mV	2% above 6V output
-20°C - 0°C, >5% load	2% or 100mV	2% above 6V output
≤5% load	4%	
Voltage setting accuracy	<1%	of set voltage
Remote sense	Option	0.5V (voltage at the output terminals must remain within the adjustment range specified above)
Minimum load	0W	
Temperature coefficient	0.02%	of rated voltage per °C
Load regulation	<1%	for 0-100% load change
Line regulation	<0.1%	for 90-264Vac input change
Cross regulation	0.1%	(5mV for outputs below 5V) for 100% load change on any output
Transient deviation	<5%	of set voltage for 25% to 75% load change 250mV for outputs below 5V
Recovery	1ms	for recovery to 1% or 100mV of set voltage (between 6V and 30V recovery is 1.5ms)
Over voltage protection	Yes	Latching, module shuts down, cycle ac to restart.
Over current protection	Hiccup	Auto recovers after removal of load
Short circuit protection	Yes	Indefinitely protected, see application notes for details
Over temperature protection	Yes	Module protection shuts down output, cycle ac to restart. Shutdown temperature varies according to ambient, output power and input voltage.

**How To Create A Product Description**

Choose your required output voltage (from the table above)  
For example, if you need 30V / 10A, you would choose 30YCSL as your required module.

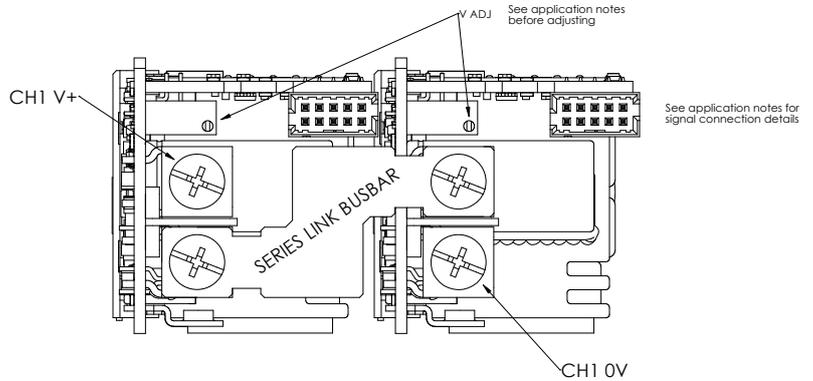


## YF Module - 4 slots width, 1 output channel

Maximum module power	1008W
Available signals	Module good, module inhibit or enable, remote sense

### AVAILABLE OUTPUT VOLTAGES (at PSU output terminals)

Adjustment range (volts)	Current	Output Power	Max Capacitive Load
24 - 26.4	42A	1008W	650μF/A
48 - 52.8	21A	1008W	500μF/A
96 - 105.6	10.5A	1008W	125μF/A

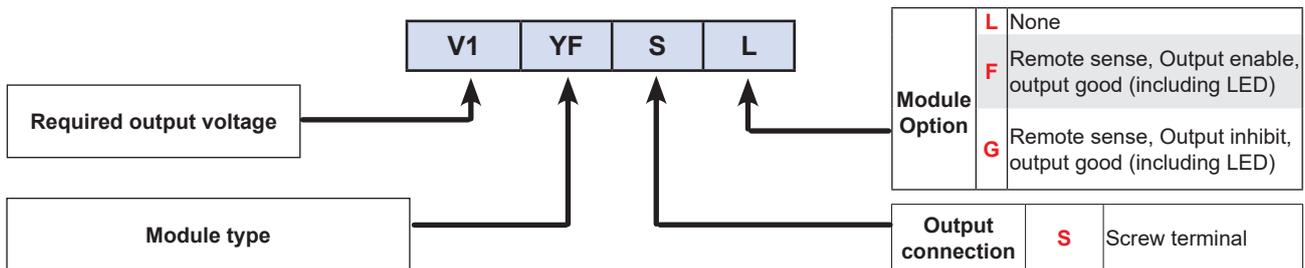


### Output Specification

Rise time	<75ms	(with resistive load) to 90% of voltage, monotonic rise above 10%
Turn on overshoot	<5%	Load type dependent
Ripple and noise		pk-pk, using 20MHz bandwidth
0°C - 70°C, 0-100% load	3%	or 100mV - whichever is greater
-20°C - 0°C, 0-100% load	3%	
Voltage setting accuracy	<1%	of set voltage
Remote sense	Option	0.5V (voltage at the output terminals must remain within the adjustment range specified above)
Minimum load	0W	
Temperature coefficient	0.016%	of rated voltage per °C
Load regulation	<1%	for 0-100% load change
Line regulation	<0.1%	for 90-264Vac input change
Cross regulation	<0.1%	(or 5mV, whichever is greater)
Transient deviation	<5%	of set voltage for 25% to 75% load change
Recovery	1ms	for recovery to 1% or 100mV of set voltage, 25-75% load step
Over voltage protection	Yes	Latching, module shuts down, cycle ac to restart.
Over current protection	Hiccup	Auto recovers
Short circuit protection	Yes	Indefinitely protected, see application notes for details
Over temperature protection	Yes	Latching, module protection shuts down output, cycle ac to restart. Shutdown temperature varies according to ambient, output power and input voltage.

### How To Create A Product Description

Choose your required output voltage (from the table above)  
 For example, if you need 49V / 21A , you would choose 49YFSL as your required module.

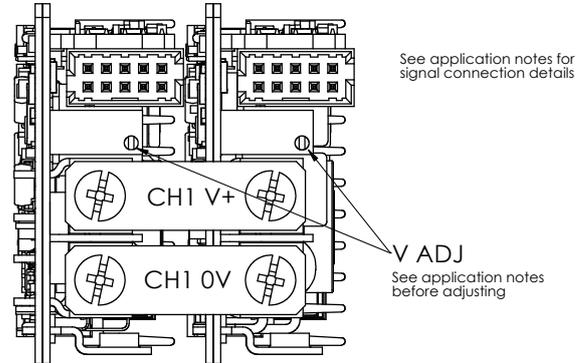


**ZC Module - 2 slots width, 1 output channel**

Maximum module power	260W
Available signals	Module good, module inhibit or enable, remote sense

**AVAILABLE OUTPUT VOLTAGES (at PSU output terminals)**

Adjustment range (volts)	Current	Output Power	Max Capacitive Load
3.3 - 6	54A	260W	1000µF/A

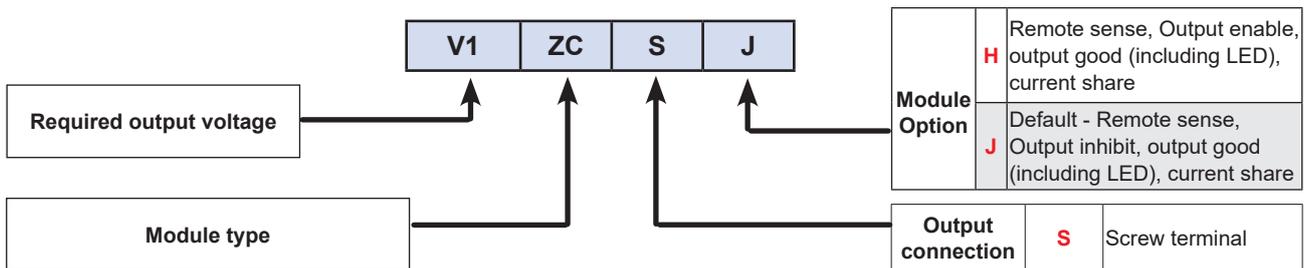


**Output Specification**

Rise time	<75ms	(with resistive load) to 90% of voltage, monotonic rise above 10%
Turn on overshoot	<5%	Load type dependent
Ripple and noise	max of	pk-pk, using 20MHz bandwidth
0°C - 70°C, >5% load	1% or 50mV	2% above 6V output
-20°C - 0°C, >5% load	2% or 100mV	2% above 6V output
≤5% load	4%	
Voltage setting accuracy	<1%	of set voltage
Remote sense	Option	0.5V (voltage at the output terminals must remain within the adjustment range specified above)
Minimum load	0W	
Temperature coefficient	0.02%	of rated voltage per °C
Load regulation	<1%	for 0-100% load change
Line regulation	<0.1%	for 90-264Vac input change
Cross regulation	0.1%	(5mV for outputs below 5V) for 100% load change on any output
Transient deviation	<5%	of set voltage for 25% to 75% load change 250mV for outputs below 5V
Recovery	1ms	for recovery to 1% or 100mV of set voltage (between 6V and 30V recovery is 1.5ms)
Over voltage protection	Yes	Latching, module shuts down, cycle ac to restart.
Over current protection	Hiccup	Auto recovers after removal of load
Short circuit protection	Yes	Indefinitely protected, see application notes for details
Over temperature protection	Yes	Module protection shuts down output, cycle ac to restart. Shutdown temperature varies according to ambient, output power and input voltage.

**How To Create A Product Description**

Choose your required output voltage (from the table above)  
For example, if you need 4V / 54A, you would choose 4ZFSJ as your required module.

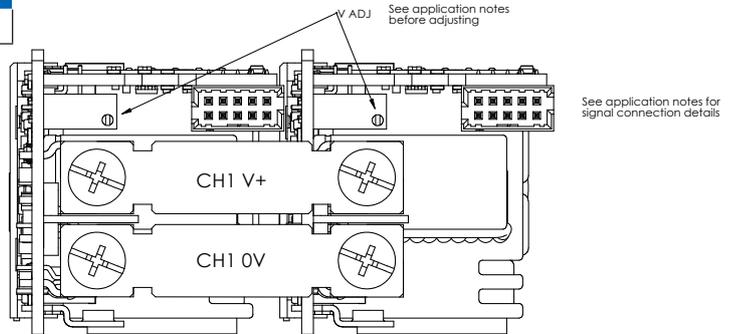


## ZF Module - 4 slots width, 1 output channel

Maximum module power	900W
Available signals	Module good, module inhibit or enable, remote sense

### AVAILABLE OUTPUT VOLTAGES (at PSU output terminals)

Adjustment range (volts)	Current	Output Power	Max Capacitive Load
12 - 12.8	76A	972.8W	1000µF/A

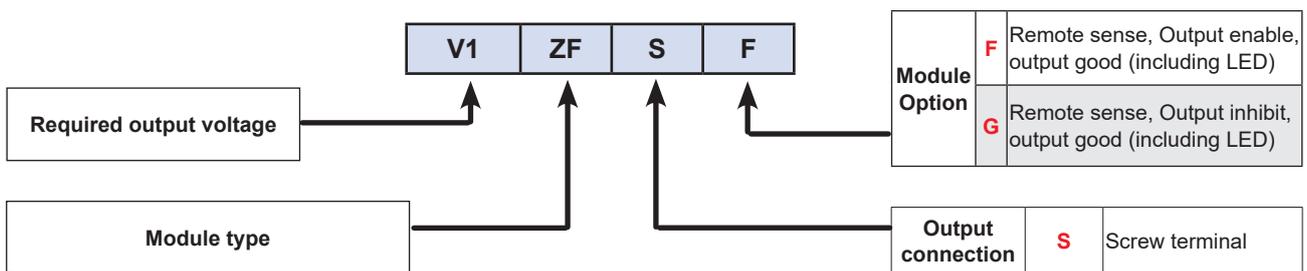


### Output Specification

Rise time	<75ms	(with resistive load) to 90% of voltage, monotonic rise above 10%
Turn on overshoot	<5%	Load type dependent
Ripple and noise		pk-pk, using 20MHz bandwidth
0°C - 70°C, 0-100% load	3%	or 100mV - whichever is greater
-20°C - 0°C, 0-100% load	3%	
Voltage setting accuracy	<1%	of set voltage
Remote sense	Option	0.5V (voltage at the output terminals must remain within the adjustment range specified above)
Minimum load	0W	
Temperature coefficient	0.016%	of rated voltage per °C
Load regulation	3.5%	for 0-100% load change
Line regulation	<0.1%	for 90-264Vac input change
Cross regulation	<0.1%	(or 5mV, whichever is greater)
Transient deviation	<5%	of set voltage for 25% to 75% load change
Recovery	1ms	for recovery to 1% or 100mV of set voltage, 25-75% load step
Over voltage protection	Yes	Latching, module shuts down, cycle ac to restart.
Over current protection	Hiccup	Auto recovers
Short circuit protection	Yes	Indefinitely protected, see application notes for details
Over temperature protection	Yes	Latching, module protection shuts down output, cycle ac to restart. Shutdown temperature varies according to ambient, output power and input voltage.

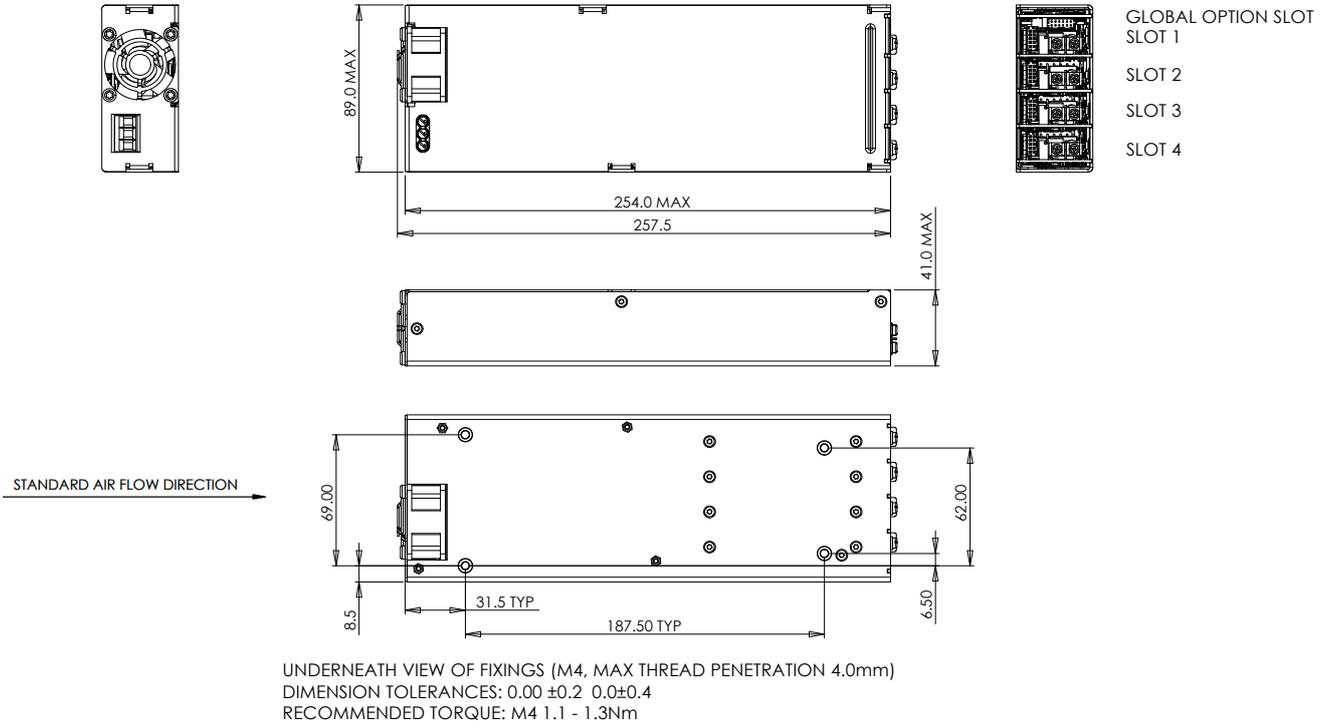
### How To Create A Product Description

Choose your required output voltage (from the table above)  
 For example, if you need 12V / 75A, you would choose 12ZF SF as your required module.



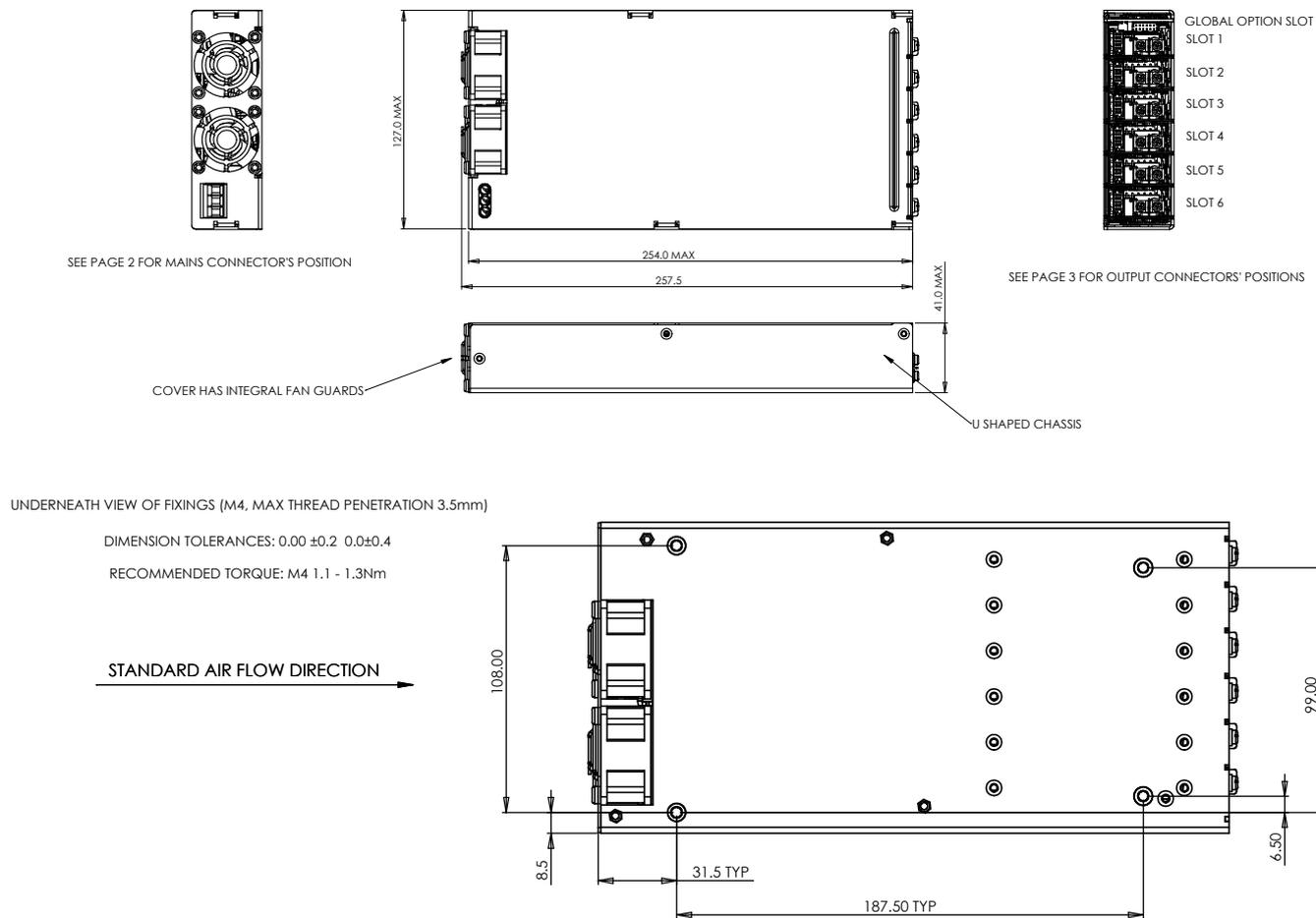
### MU4 Outline Drawing

#### STANDARD VERSION WITH FAN



## MU6 Outline Drawings

### STANDARD VERSION WITH FAN



Dimensions		
MU4 Size (WxLxH)	mm	89 x 254 x 41
MU4 Size (WxLxH)	Inches	3.5 x 10 x 1.6
MU6 Size (WxLxH)	mm	127 x 254 x 41
MU6 Size (WxLxH)	Inches	5 x 10 x 1.6



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