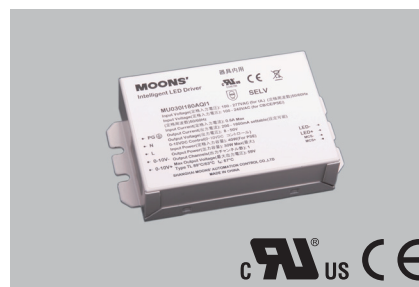


MU030I180AQI1

Features

- 1 LED channel,100% dimming Output Current can be set to from 200mA to 1800mA
- Soft light Dimming Range 0.1%~100%
For linear dimming curve, the minimum dimming level is 0.1%
For logarithmic dimming curve, the minimum dimming level is 0.1%
- Support Isolated 0~10V Dimming
- Dim-to-off with Standby Power<0.3 W
- Constant Power Maximum is 30W
- Protection: OTP, SCP, NLP,OPP
- Mode of wiring: From the side to wiring
- UL Class 2,IP20
- 5-year warranty



126 × 76 × 30mm

Electrical Specifications

Rated input voltage range	90-305 VAC
Maximum input voltage range	90 - 305 V
Input voltage frequency	50 / 60 Hz
Leakage current	<750uA
Output voltage range	8 - 50 V
Output current	200-1800mA
Maxium input power	<40W
Efficiency typical value (230V,50Hz,full loaded ^①)	84 - 86 %
Power factor (230V,50Hz,full loaded ^①)	>0.95
Stand-by power consumption ^②	<0.3W
THD(230V,50Hz,full loaded ^①)	<15%
Start-up time (230V,50Hz,full loaded)	<0.5S
Start-up time (120V,50Hz,full loaded)	<1S
The maximum setup current precision	± 5%
Input inrush current	<15A
Dimming range	0.1 -100%
Withstand Voltage I/P-O/P	3750 V
Withstand Voltage I/P-FG	1875 V
Withstand Voltage O/P-FG	500V
Surge L/N-earth , L-N	2KV,1KV
Operating Temp., Humidity	-25℃~+67℃,20%~95%RH
Storage Temp.,Humidity	-40℃~+85℃,10%~95%RH
Lifetime	≥50000hours@Tc=77℃ at 120VAC input,100% load
Weight	360g
Reference dimension	126 × 76 × 30 mm

Model Specifications

Type	Output Current	Output Voltage	Output Power	Input Power (230V,50Hz)	Efficiency	Case Temperature	Ambient Temperature
MU030I180AQI1	600 mA	50 V	30.0	35.1	85.5%	89℃	-25 - 67℃
	700 mA	43 V	30.1	35.2	85.6%	89℃	-25 - 67℃
	800 mA	38 V	30.4	35.4	85.8%	89℃	-25 - 67℃
	900 mA	34 V	30.6	35.6	86.1%	89℃	-25 - 67℃
	1000 mA	30 V	30.0	34.9	85.9%	89℃	-25 - 67℃
	1100 mA	28 V	30.8	35.9	85.9%	89℃	-25 - 67℃
	1200 mA	25 V	30.0	35.0	85.7%	89℃	-25 - 67℃
	1300 mA	23 V	29.9	35.0	85.3%	89℃	-25 - 67℃
	1400 mA	22 V	30.8	36.0	85.5%	89℃	-25 - 67℃
	1500 mA	20 V	30.0	35.4	84.8%	89℃	-25 - 67℃
	1600 mA	19 V	30.4	35.9	84.7%	89℃	-25 - 67℃
	1700 mA	18 V	30.6	36.2	84.4%	89℃	-25 - 67℃
	1800 mA	17 V	30.6	36.6	83.7%	89℃	-25 - 67℃

*1: Load:50V*600mA

*2: Stand-by power consumption 110V<50mW, 230V<200mW

■ Safety & EMC Compliance

CUL	UL8750,UL1310,CAN/CSA-C22.2 NO.223-M91
CE	EN61347-1,EN61347-2-13
Conducted Emissions	FCC Part15 Class B / EN55015
Radiated Emissions	FCC Part15 Class B / EN55015
Harmonic Current Emissions	EN 61000-3-2
Voltage Fluctuations and Flicker	EN 61000-3-3
Electrostatic Discharge	EN 61000-4-2
RFE Field Susceptibility	EN 61000-4-3
Electrical Fast Transient	EN 61000-4-4
Conducted Radio Frequency	EN 61000-4-6
Power Frequency Magnetic Field Test	EN 61000-4-8
Voltage Dips	EN 61000-4-11
Electromagnetic Immunity	EN61547

■ Function Description

- MCS technology

Connect Smartkey to the driver through MCS(Multifunctional Configuration Settings) ports. With MOONS' Configurator software, you can set the MAX current of the driver(each step is 1 mA),dimming curve type, etc.

Please refer to specification of Smartkey to get specific information.

- Temperature Detection

In order to protect the LED, the temperature of LED is detected by a NTC. When the temperature exceeds the point which can be set by Smartkey, the output current can be decreased automatically, but not less than 25%.

- Constant Output Power

The driver can satisfy the curve of constant output power within a large range of output current and voltage.

- Protection

Thermal Protection

When the temperature of the inside PCB exceeds 110℃ , output current will be decreased to 50%. And it can not recover until the temperature drops to 70℃ .

Short-circuit Protection

Once the output short-circuits, the output will be cut off automatically. Then the driver will try to restart every 4s.

No-load Protection

The driver operating with no load will not be damaged, and it will try to restart every 4s. So the driver supports hot plug in.

Over-Power Protection

If the total power exceeds 40W, the output current of each channel will decrease to 50% , and then the maximum output power is increased to 30W gradually.

- Online Update

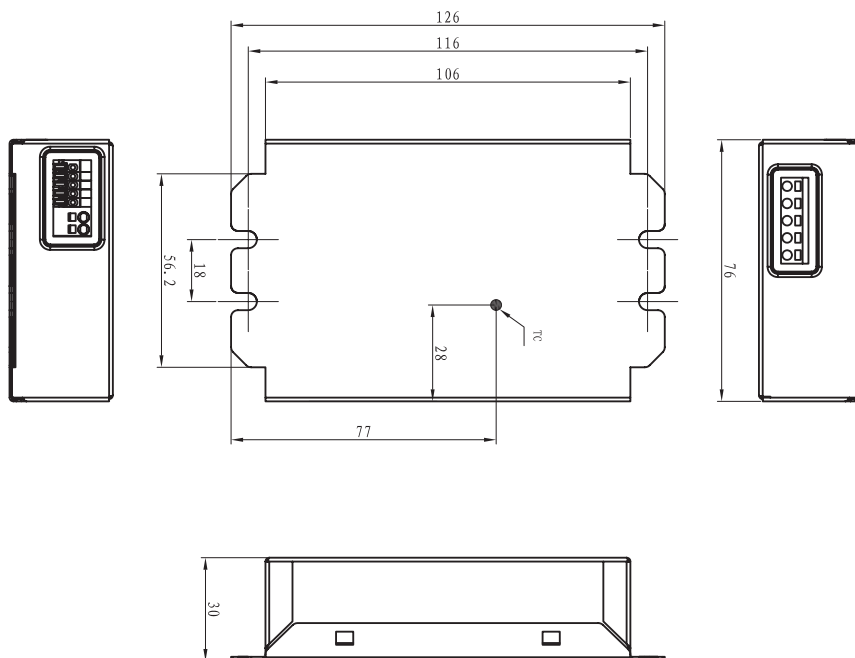
Use smart key to connect PC and the driver to update the firmware.

Please refer to the specification of Smart key.

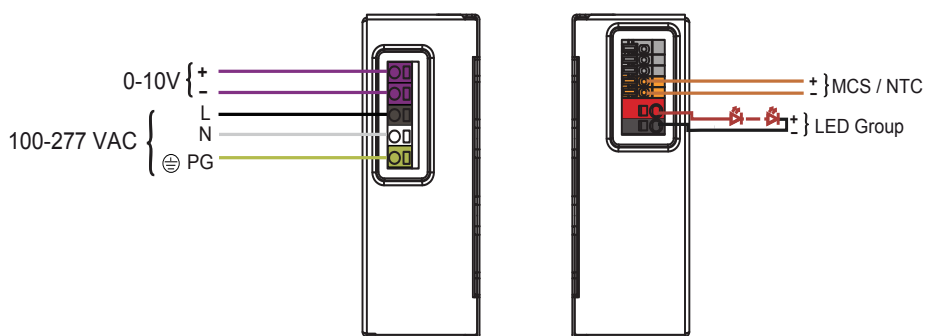
*1: Recommended manufacture and type of the NTC

Manufacture: Thinking TSM2A473J409ARZA(SMD) \ VISHAY NTCS0805e4473JXT \ MURATA NCP21WB473J03RA

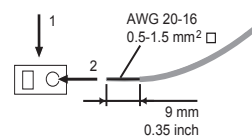
Mechanical Outline (unit: mm)



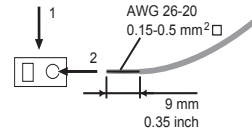
Ports



For input,output,0-10V ports:

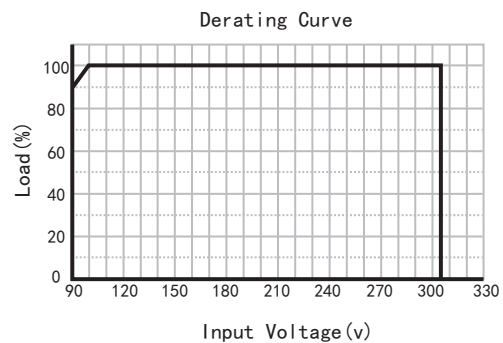
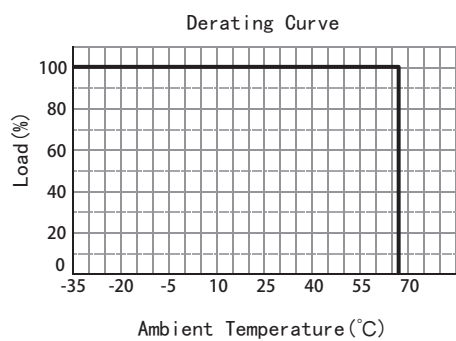


For MCS ports:

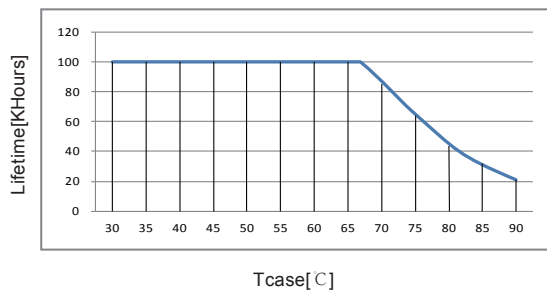


Solid or stranded copper wires only.

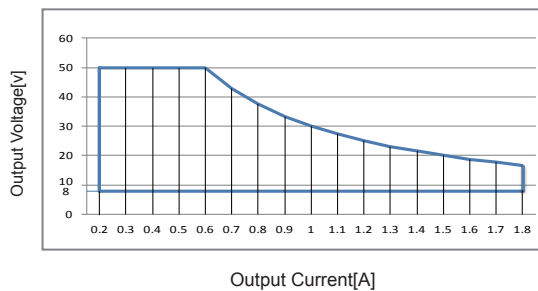
Test curve



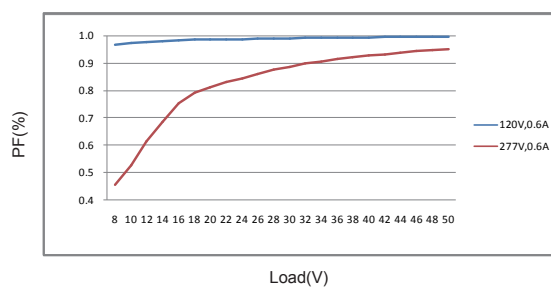
Lifetime VS.Tcase



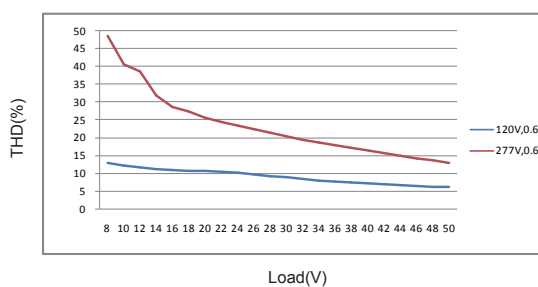
V/I OPERATING RANGE



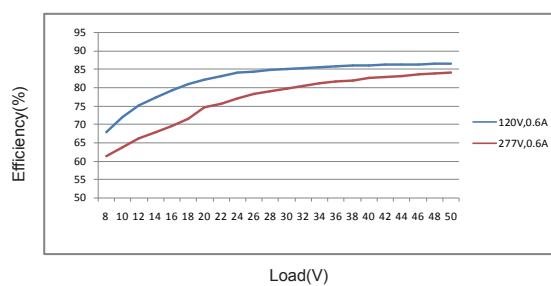
Power Factor Curve



Current Total Harmonic Curve



Efficiency Curve



0-10V Curve

