

PISE-A075A (Pb-Free) 75W Selectable Output Power

80V - 152V / 0.35A - 0.5A - 0.7A / 75W

Features

- ▶ Dimmable Type : 1 -10 Dimming
- ▶ Input Cable : Double or Reinforced Insulation
- ▶ Selectable Output Current (0.35A / 0.5A / 0.7A)
- ▶ Constant Voltage / Constant Current Control
- ▶ High Efficiency & Active Power Factor Correction
- ▶ Protection : UVP, OVP, SCP, OTP and OCP
- ▶ UL8750, UL1012, EN61347, BIS R-41033308 Output Safety Certifications Approved

Critical Specifications

Input Voltage	Output Voltage	Output Current	Output Power	Efficiency	THD	Surge		PF
						Com.	Diff.	
108 - 305	80 - 152	0.35 - 0.7A	Max. 75	Up to 92%	< 20%	6kV	4kV	> 0.9



Input Specifications

Parameter	Min.	Typ.	Max.	Unit	Remark
Input Voltage	108	-	305	VAC	
Input Current	-	-	0.9	A	@ Vin=108V / Max. Load
Input Frequency	47	-	63	Hz	
Power Factor	0.9	-	-	PF	@ Over 75% Output Load
Inrush Current	-	-	70	Apk	Based on IEC60555

Output Specifications

Parameter	Min.	Typ.	Max.	Unit	Remark
Output Voltage	80	-	152	VDC	
Output Current	-	0.35 / 0.5 / 0.7	-	A	Selectable Output Current
Output Dimming Current Range	10	-	100	%	1 -10 Dimming
Output Current Tolerance	-5	-	+5	%	@ Max. Output Current
Output Ripple Current	-	-	10	%	
Start-up Time	-	-	500	ms	
Output Power Tolerance	-5	-	+5	%	

Datasheet is subject to change without notice.

Protection Functions

Parameter	Min.	Typ.	Max.	Unit	Remark
Output Over Voltage Protection	-	165	-	VDC	Output Voltage
Output Short Circuit Protection	-	-	-	A	Auto Recovery
Internal Over Temp. Protection	-	90	-	°C(Tc)	Maintaining 10% dim. @ 100°C
External Over Temp. Protection	-	80	-	°C(Ta)	Maintaining 10% dim. @ 85°C

Reliability Specifications

Parameter	Min.	Typ.	Max.	Unit	Remark
Life Time	100	-	-	KHr	@ Tc=70°C
	50	-	-	KHr	@ Tc=80°C
Failure Rate	-	559	-	FITs	@ Tc=80°C
MTBF	-	1,786	-	KHr	@ Tc=80°C

※ The life time has been calculated based on Telcordia report.

Environmental Specifications

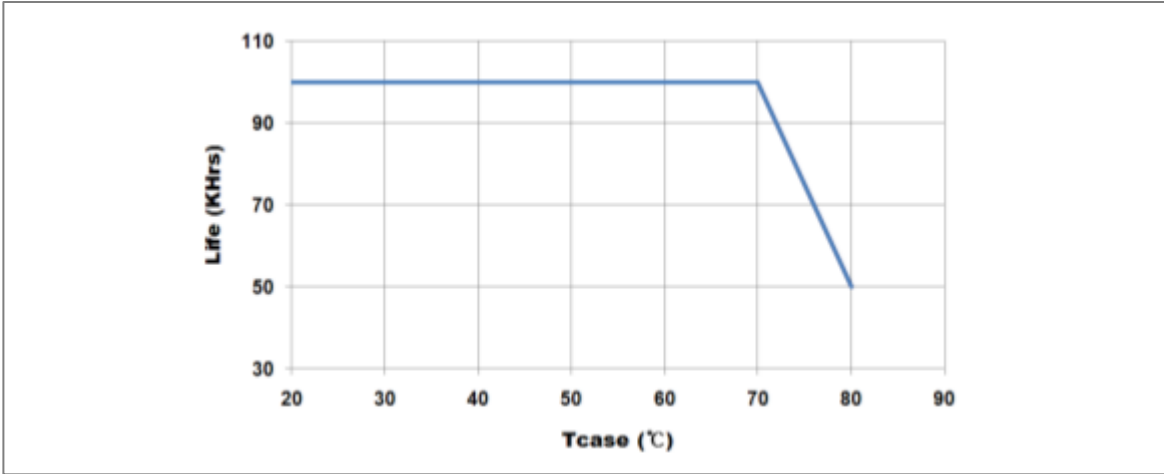
Parameter	Min.	Typ.	Max.	Unit	Remark
Operation Temperature	-40	-	55	°C	@ Ta
	-	-	80	°C	@ Tc
Storage Temperature	-40	-	85	°C	@ Ta
Humidity	10	-	90	%	Relative humidity for operation
	-	-	90	%	Relative humidity for storage

Standards

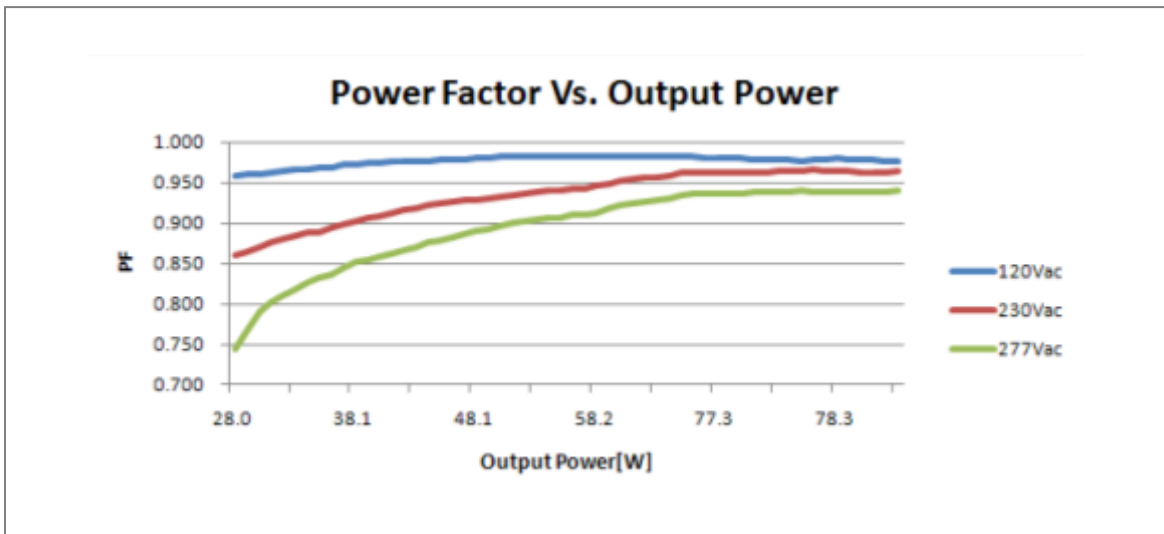
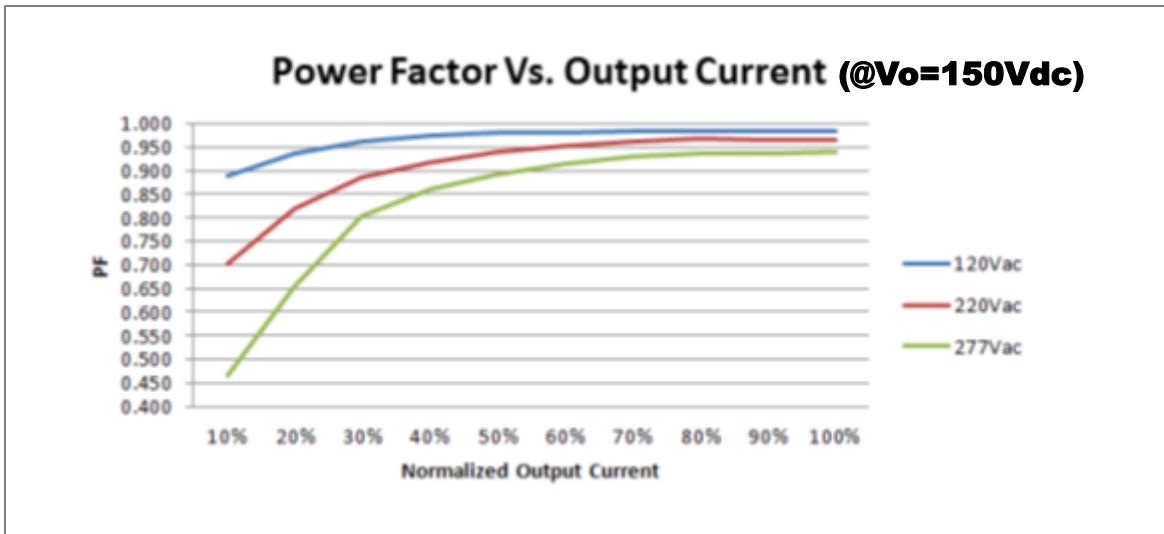
Parameter	Condition	Remark
Safety Standards	To be designed to meet the requirements as follows ; - UL 8750 - EN 61347-1/A1:2011/A2:2013 - EN 61347-2-13:2014	Protection Type : Manual Resetting Type
EMI / RFI Standards	To be designed to meet the requirements as follows ; - FCC part 15, Class B verification - EN 55015:2006+A1:2007+A2:2009 - EN 61000-3-2:2006+A1:2009+A2:2009 - EN 61000-3-3:2008 - EN 61547:2009	

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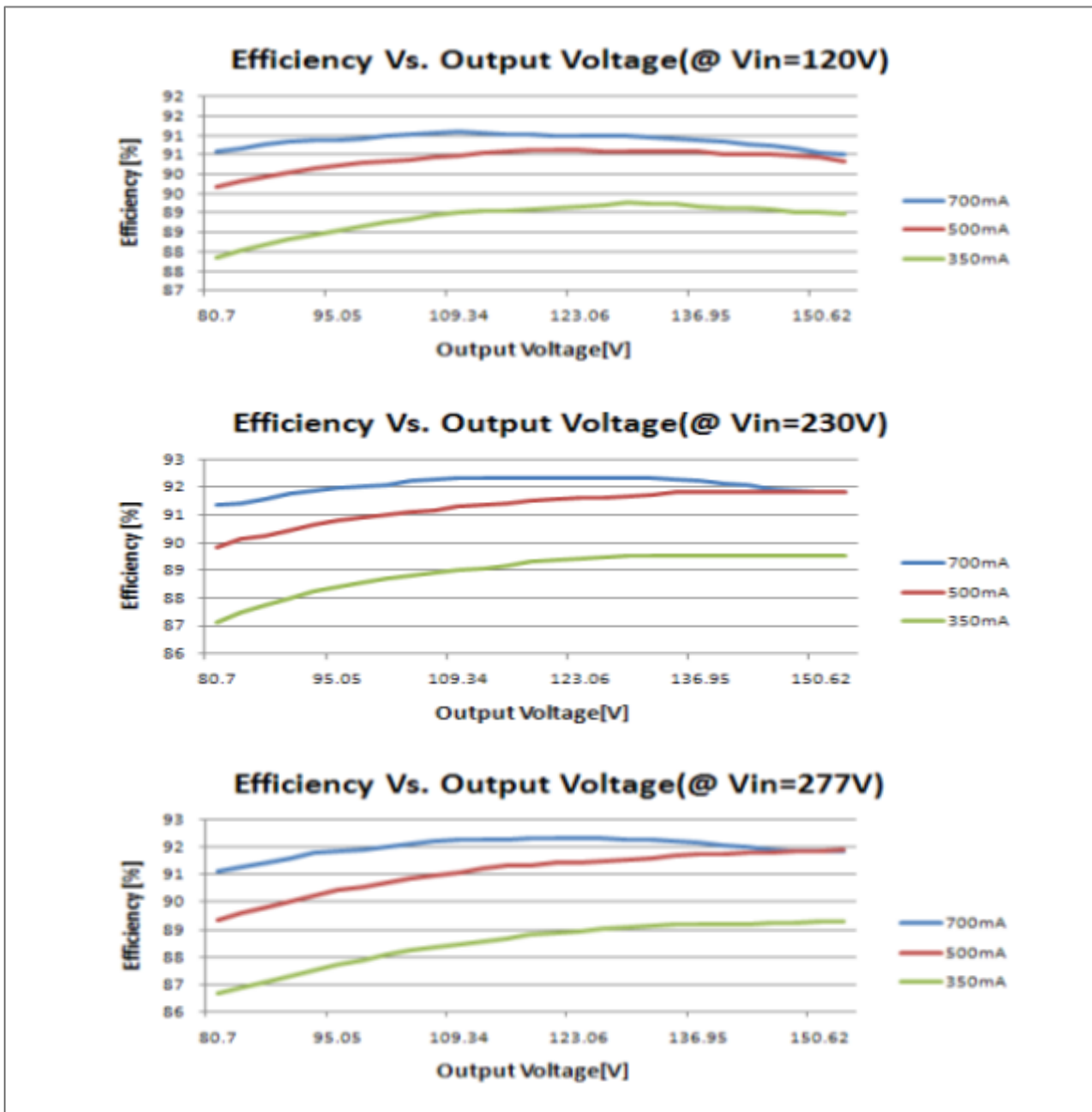
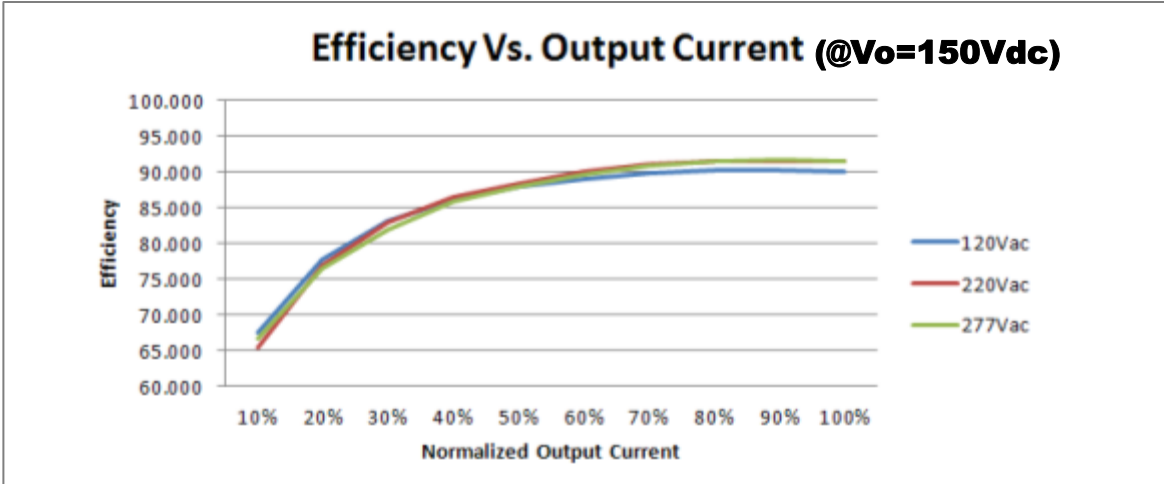
Life Time vs. Case Temperature Curve



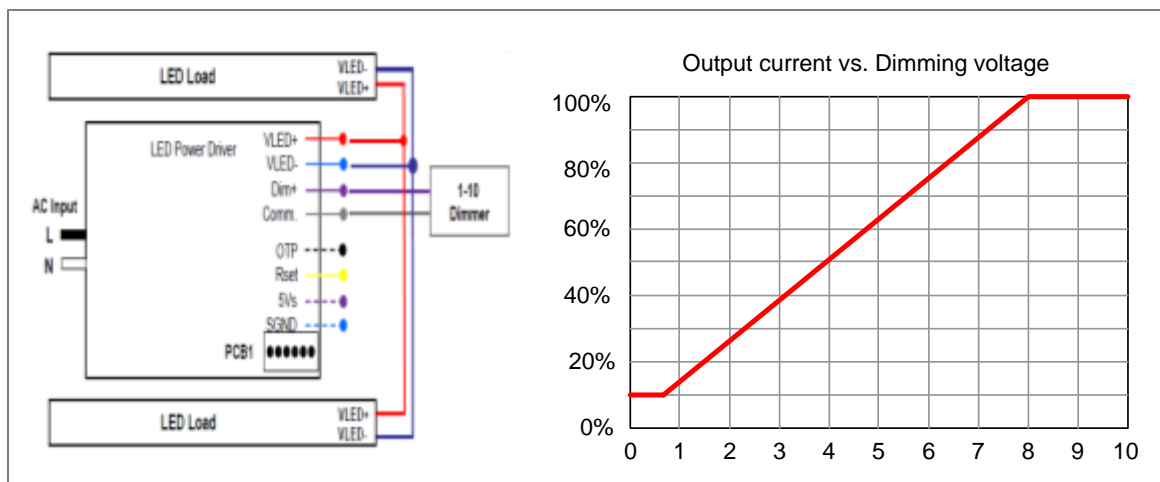
Power Factor Characteristics



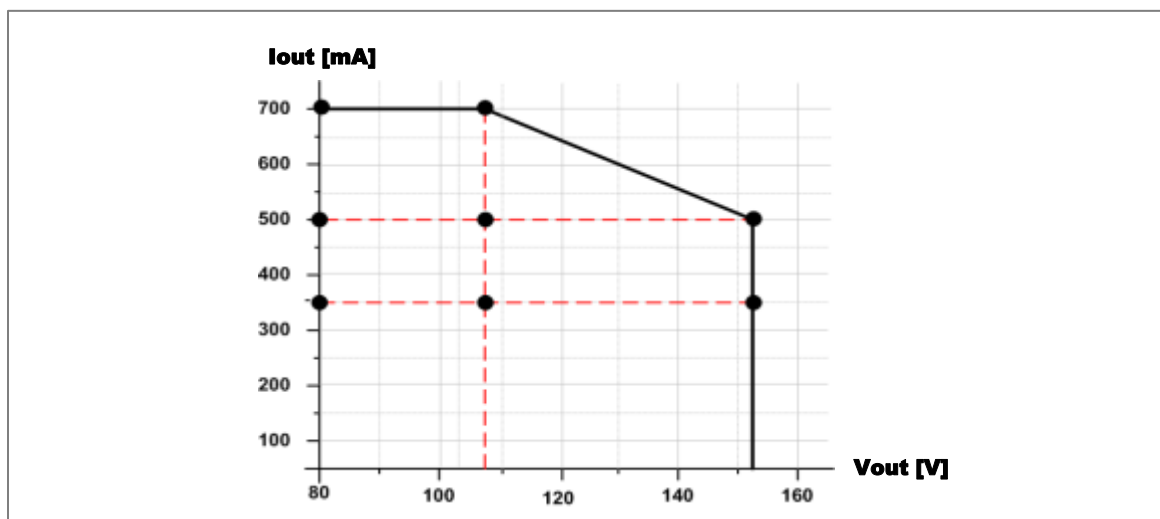
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Efficiency Characteristics

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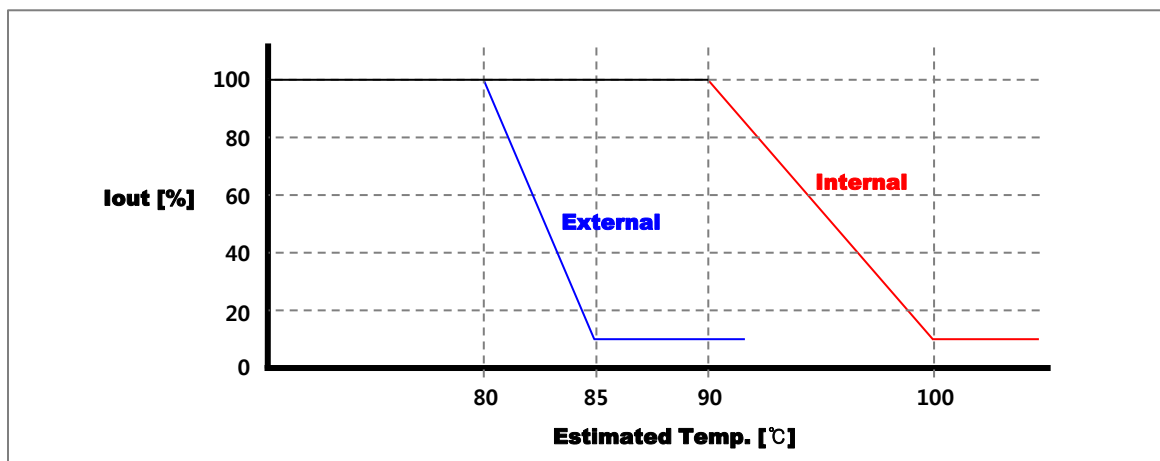
Dimming Control (1 - 10V Dimming)



Constant Power Control (I_{out} vs V_{out} Curve)



I_{out} vs NTC Temp. (OTP)



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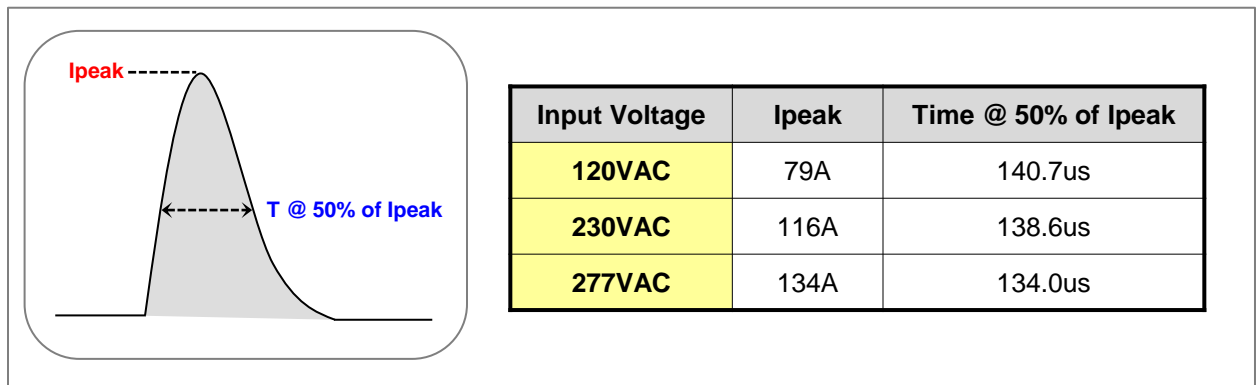
Isolation

Isolation (V)	Mains Input	LED Output	NTC/Dim	Current Selection	Metal Housing
Mains Input	NA	4000	4000	4000	4000
LED Output	4000	NA	NA	NA	4000
NTC/Dim	4000	NA	NA	NA	4000
Current Selection	4000	NA	NA	NA	4000
Metal Housing	4000	4000	4000	4000	NA

Leakage Current

- ▶ Leakage Current < 0.5 MIU
- ▶ The leakage current must be measured again on the luminaire side.

Inrush Current Information

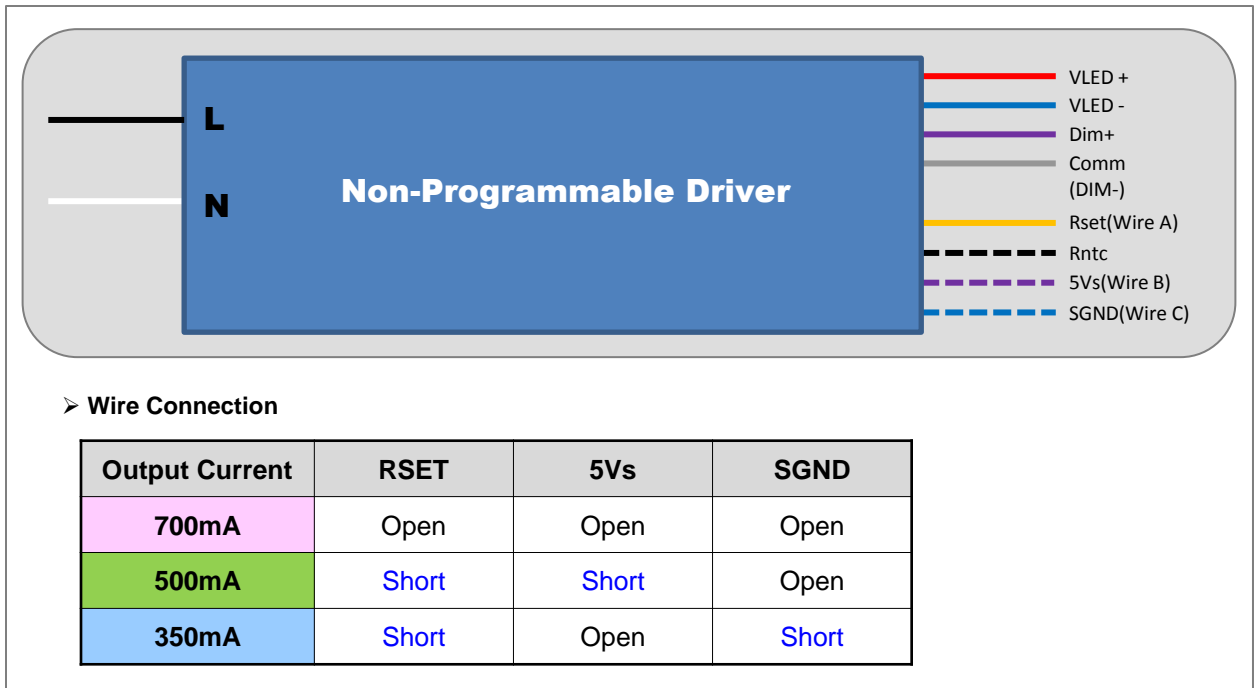


Maximum Number of Drivers per MCB

Item	Max. Number of Drivers (PISE-A075A)		
	120	230	277
Input Voltage [VAC]	120	230	277
MCB B type 10A	5	3	3
MCB B type 13A	8	5	5
MCB B type 16A	10	7	6
MCB B type 20A	15	10	9
MCB B type 25A	28	19	16

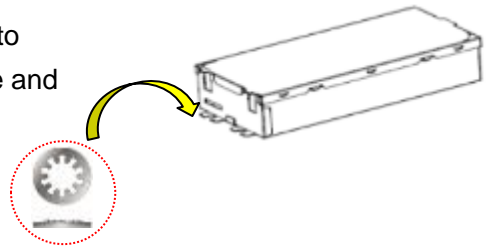
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Output Current Setting



Functional GND Connection

- ▶ Functional GND is able to be connected with one of four holes which are located in each corner of the metal case.
- ▶ Sawtooth washer is recommended to be used in order to strengthen mechanical contact between the metal case and functional GND.



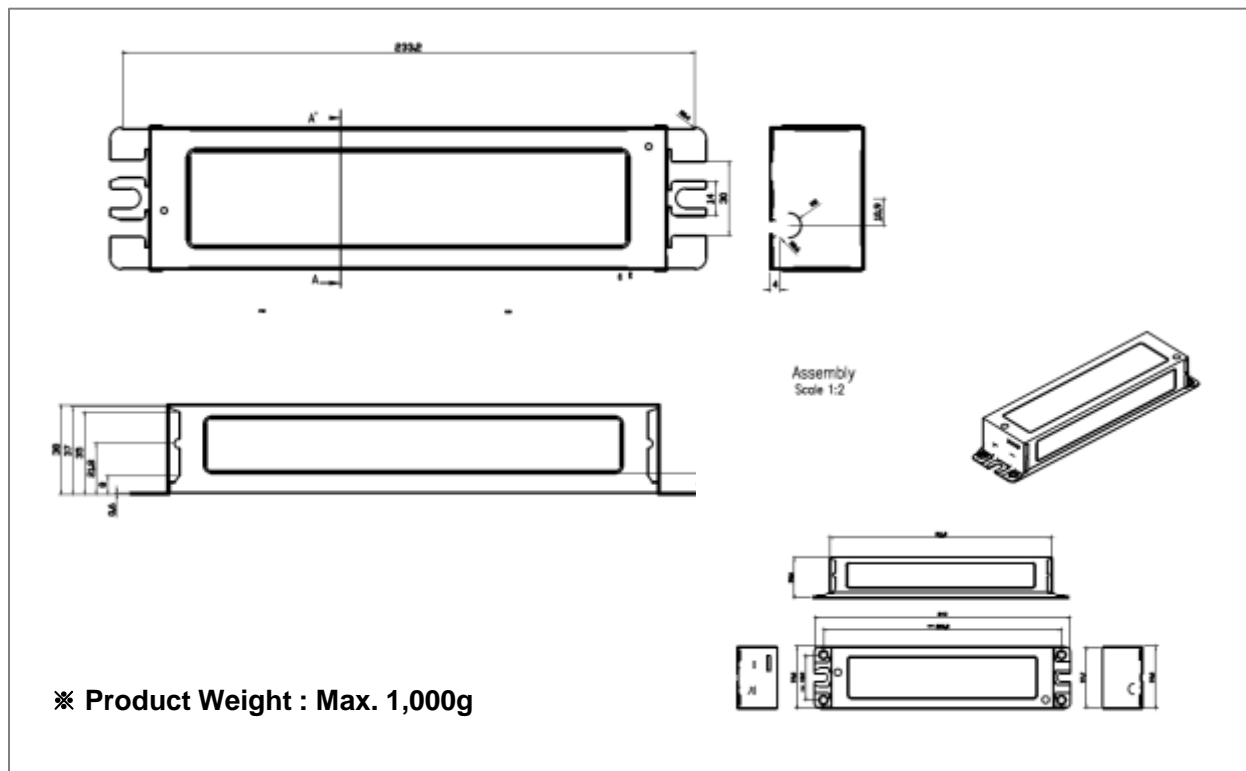
Guidelines for Driver Wire Length

Model	Output Wires (LED+, LED-)	Control Wires (DIM, COMM, NTC, RSET, 5Vs, SGND)
PISE-A075A	Max. 10 meter	Max. 0.5 meter

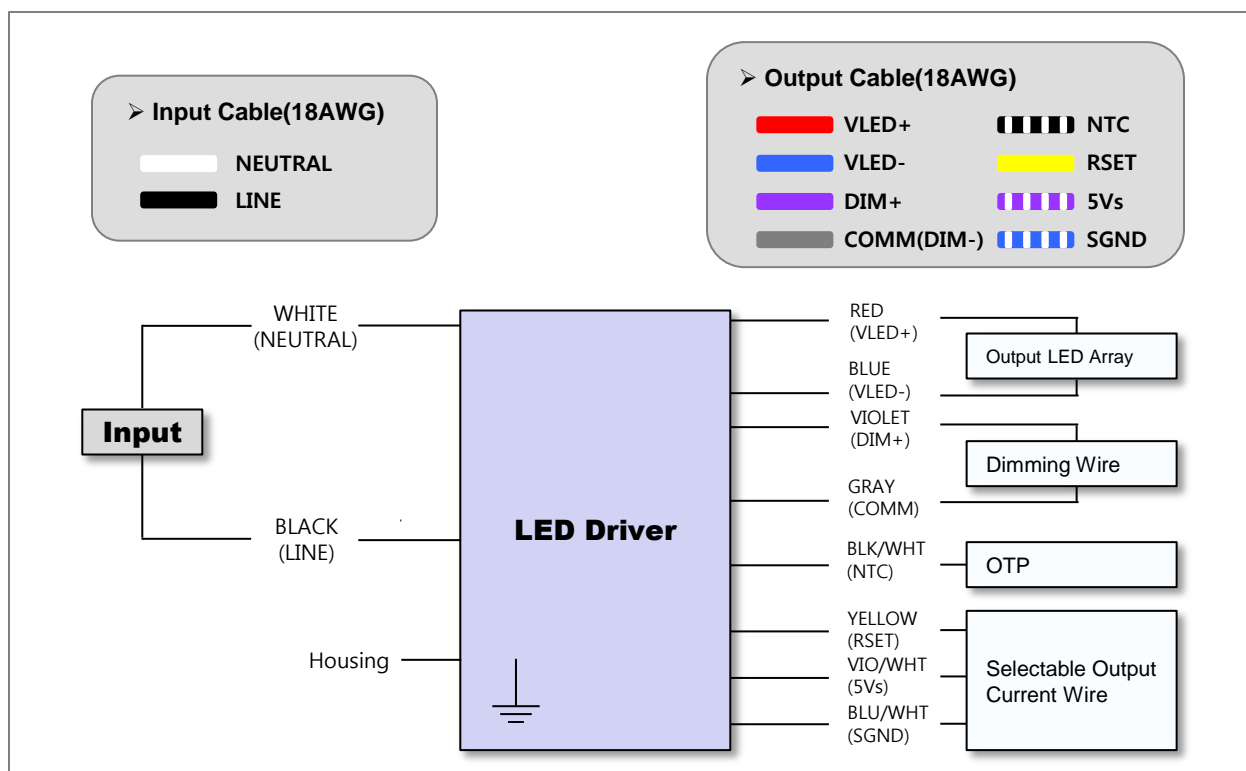
- ※ Maximum output cable length is limited by EMI and cross-sectional diameter.
- ※ All connections must be kept as short as possible to ensure good EMI performance.

Mechanical Outline

1. Case Dimension



2. Connector Wiring Diagram



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Datasheet Revision History

Change Date	Rev. No.	Description of Change	Remark
2013/11/15	1.0	Initial Release	
2013/12/16	2.0	Added and revised below information, <ul style="list-style-type: none"> - Inrush current - LED output voltage range - Output power tolerance - Failure rate / MTBF - Functional GND connection - Input cable : double or reinforced insulation - Isolation table 	
2013/12/30	3.0	Added revised below information, <ul style="list-style-type: none"> - Surge protection level (common and differential mode) - Graphics showing efficiency vs output voltage - Graphic showing Power factor vs output power 	
2014/05/09	4.0	Revised below information, <ul style="list-style-type: none"> - Failure rate / MTBF Result 	- Based on the final report
2014/06/15	5.0	Added below information, <ul style="list-style-type: none"> - Leakage current specification - Inrush current information 	
2015/01/30	6.0	Added below information, <ul style="list-style-type: none"> - IP level - Product weight - Maximum number of drivers per MCB - Guidelines for driver wire length 	
2016/04/11	7.0	Added below information, <ul style="list-style-type: none"> - BIS R-41033308 Output Safety Certifications Approved 	