

PS-INF-3.5KW



OUTDOOR POWER SUPPLY FOR INFINITY® LIGHTING SYSTEMS

PRODUCT SPECIFICATION SHEET

DESCRIPTION

PS-INF-3.5KW is a state of the art, high power density, outdoor rated power supply designed by GVA Lighting for INFINITY® circuits. Accepting a broad range of input voltages and delivering up to 3.5 kW of power from a compact and robust form factor, PS-INF-3.5KW enables circuit lengths upwards of 420 m (1377 ft)¹.

DATE:	
TYPE:	
COMPANY:	
PROJECT:	



KEY FEATURES

- Power supply for GVA Lighting's proprietary INFINITY® Technology
 - Power output: 380 V DC, 3.5 kW
 - High Resistance Mid-Point Ground (HRMG) for superior safety
 - Wide input voltage range 90~264 V AC2, 47~63 Hz, for single or multi-phase systems
 - Built in protection from power surge, over-voltage, short circuit and over-temperature
 - LED indicator for fault detection and diagnosis
- Power factor >0.95 at full load
 - Operating temperature -40°C to +40°C (-40°F to +104°F)
 - Temperature variable active cooling via PID controller and IP68 rated axial fans
 - Robust anodized aluminum construction for superior corrosion resistance and heat dissipation
 - Easy to install using four mounting keyways
 - IP66

1. Input voltage < 208 V AC; 80% maximum load, 2 W/300 mm luminaires
2. 277 V AC feasible with addition of external transformer (see page 7)

PS-INF-3.5KW

INFINITY[®]
BY TECHNOLOGY



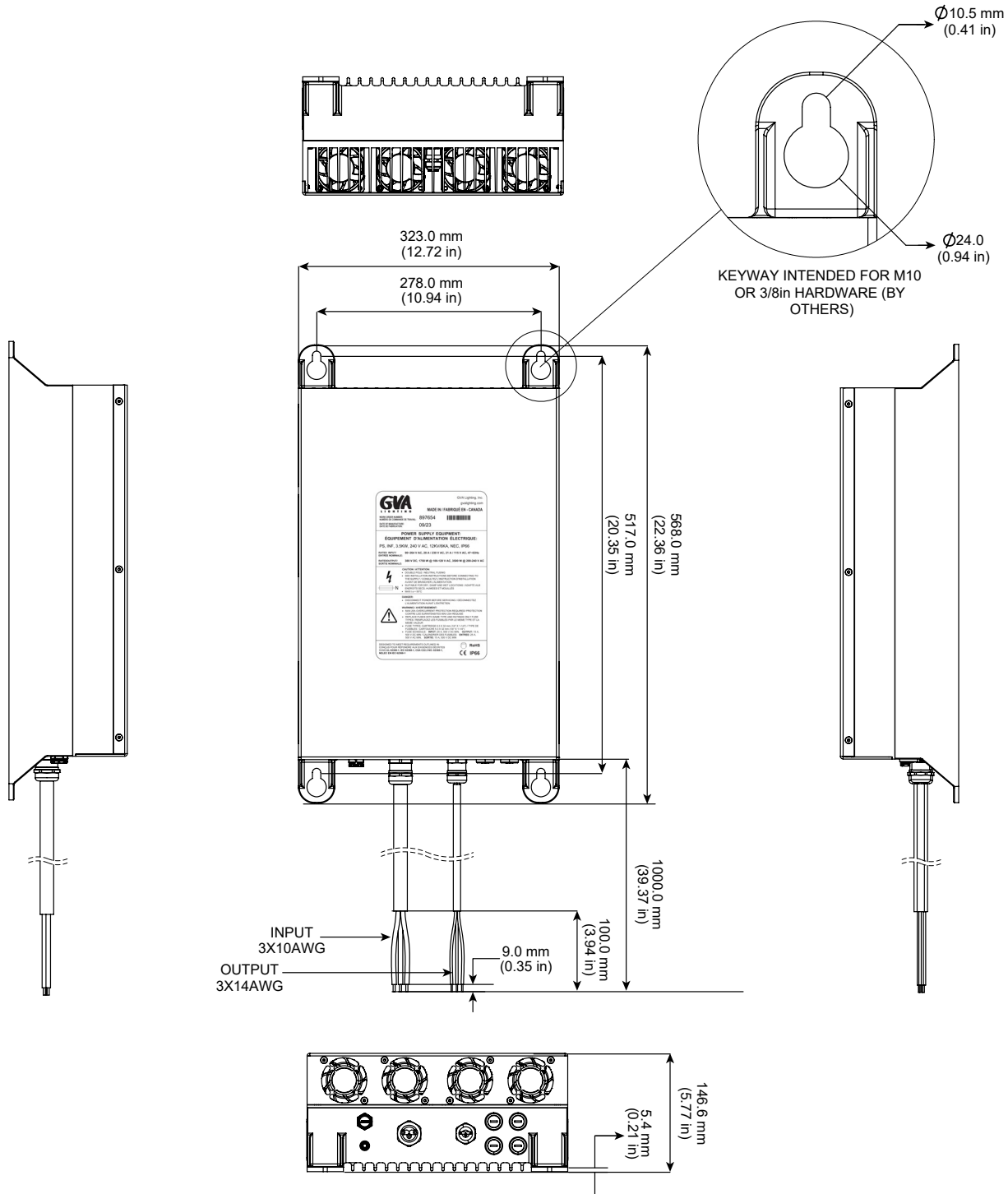
GVA
LIGHTING

OUTDOOR POWER SUPPLY FOR INFINITY[®] LIGHTING SYSTEMS

PRODUCT SPECIFICATION SHEET

DIMENSIONS

NOTE: To be installed in vertical orientation, cables facing downwards.



PS-INF-3.5KW

INFINITY[®]
BY TECHNOLOGY



GVA
LIGHTING

OUTDOOR POWER SUPPLY FOR INFINITY[®] LIGHTING SYSTEMS

PRODUCT SPECIFICATION SHEET

PRODUCT SPECIFICATION

POWER INPUT	INPUT VOLTAGE RANGE	90 ~ 264 V AC ¹
	FREQUENCY RANGE	47~63 Hz
	POWER FACTOR	PF≥0.95/230 V AC at full load. PF≥0.95/115 V AC at 60% load
	INPUT CURRENT, TYPICAL (120 V AC)	20 A
	INPUT CURRENT, TYPICAL (208 V AC)	18 A
	INPUT CURRENT, TYPICAL (230 V AC)	16.3 A
	INPUT CURRENT, TYPICAL (240 V AC)	15.6 A
	INPUT POWER CABLE	3 x 10 AWG (SOOW)
	INPUT POWER CABLE DIAMETER	16.8 mm / 0.66 in
	INPUT POWER CONDUCTORS COLOR CODING	NA: BLACK for Hot/L1, WHITE for Neutral/L2 and GREEN for PE; EU: BROWN for Line/L1, BLUE for Neutral/L2 and GREEN-YELLOW for PE
POWER OUTPUT	OUTPUT VOLTAGE, NOMINAL	380 V DC
	OUTPUT VOLTAGE, RANGE	370 V DC ~ 400 V DC
	OUTPUT CURRENT, TYPICAL (120 V AC)	5.8 A
	OUTPUT CURRENT, TYPICAL (208 V AC)	9.2 A
	OUTPUT CURRENT, TYPICAL (230 V AC)	
	OUTPUT CURRENT, TYPICAL (240 V AC)	
	OUTPUT POWER, MAX (120 V AC)	2200 W
	OUTPUT POWER, MAX (208 V AC)	3500 W
	OUTPUT POWER, MAX (230 V AC)	
	OUTPUT POWER, MAX (240 V AC)	
	OUTPUT POWER CABLE	3 x 14 AWG (TC-ER)
	OUTPUT POWER CABLE DIAMETER	9.1 mm / 0.36 in
	OUTPUT POWER CONDUCTORS COLOR CODING	RED for Positive, BLACK for Negative , GREEN for PE
PROTECTION	INPUT FUSES (120 V AC)	1 x 500 V AC/V DC 25 A rated cartridge ceramic fuse, 6.3 mm x 32 mm
	INPUT FUSES (208 V AC)	2 x 500 V AC/V DC 25 A rated cartridge ceramic fuse, 6.3 mm x 32 mm per output. Caution: both Hot / L1 and Neutral / L2 are fused
	INPUT FUSES (230 V AC)	
	INPUT FUSES (240 V AC)	
	OUTPUT FUSES (120 V AC)	2 x 500 V AC/V DC 15 A rated cartridge ceramic fuse, 6.3 mm x 32 mm per output. Caution: both lines (Positive and Negative) are fused
	OUTPUT FUSES (208 V AC)	
	OUTPUT FUSES (230 V AC)	
	OUTPUT FUSES (240 V AC)	
	INPUT SURGE PROTECTION (OPTIONS)	6 KV/3 KA, 12 KV/6 KA, 20 KV/10 KA
	INRUSH CURRENT (120 V AC)	40 A
	INRUSH CURRENT (230 V AC)	80 A

PS-INF-3.5KW

INFINITY[®]
GVA TECHNOLOGY



GVA
LIGHTING

OUTDOOR POWER SUPPLY FOR INFINITY[®] LIGHTING SYSTEMS

PRODUCT SPECIFICATION SHEET

ENVIRONMENT	WORKING TEMPERATURE	-40°C ~ +50°C / -40°F ~ 122°F
	STORAGE TEMPERATURE & HUMIDITY	-40°C ~ +80°C (-40°F ~ 176°F), 0%-60% RH (non-condensing)
	STORAGE CONDITIONS	Product to be stored in non-saline, protected location above water and free of harmful gases containing sulphur and other corrosive elements
	VIBRATION	Designed to meet ANSI C136.31-2018 to withstand intense vibration environments of bridges and overpasses
	IP RATING	IP66
PHYSICAL	HOUSING	Anodized aluminum construction for superior corrosion resistance and heat dissipation
	DIMENSIONS (L x W x H), CABLES OMITTED	568 mm x 323 mm x 146.6 mm / 22.4 in x 12.7 in x 5.8 in
	WEIGHT kg (lbs)	19 kg / 41.9 lbs
	COOLING	Natural and forced convection. Temperature variable cooling via PID controller and IP68 rated axial fans
	CONNECTIONS	1 m (3.3 ft) input/output cables - flying leads
CERTIFICATION & SAFETY	CERTIFICATION	CE, RoHS, UKCA
	SAFETY STANDARDS	UL 62368-1, IEC 62368-1, CSA C22.2 NO. 62368-1, NELEC EN IEC 62368-1
	EMC EMISSION	CISPR 32 Edition 2.1 2019-10 Class A
	EMC IMMUNITY	IEC 61547, IEC 61000-4-2 Level 4, IEC 61000-4-3 Level 3, IEC 61000-4-4 Level 4, IEC 61000-4-5 Level 4, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, ANSI C82.77-5-2017
MANUFACTURING/ ORIGIN	Designed and manufactured in Canada by GVA Lighting, Inc. ISO Certified Company for 9001:2015 and 14001:2015 - Quality Management System and Environmental Management System	

1. 277 V AC feasible with addition of external transformer (see page 7)
2. Figures above represent values at full rated load for referenced input voltage

PS-INF-3.5KW

INFINITY[®]
BY TECHNOLOGY



GVA
LIGHTING

OUTDOOR POWER SUPPLY FOR INFINITY[®] LIGHTING SYSTEMS

PRODUCT SPECIFICATION SHEET

ORDERING CODE

North America

PART NUMBER	DESCRIPTION
INPUT VOLTAGE: 120 V ¹	
G20795-CN	PS-INF-3.5KW, 120 (LN), 3KA/6KV, N, IP66
G20795-US	PS-INF-3.5KW, 120 (LN), 3KA/6KV, N, IP66
G20796-CN	PS-INF-3.5KW, 120 (LN), 6KA/12KV, N, IP66
G20796-US	PS-INF-3.5KW, 120 (LN), 6KA/12KV, N, IP66
G20797-CN	PS-INF-3.5KW, 120 (LN), 10KA/20KV, N, IP66
G20797-US	PS-INF-3.5KW, 120 (LN), 10KA/20KV, N, IP66
INPUT VOLTAGE: 208/240 V	
G20610-CN	PS-INF-3.5KW, 208/240 (LL), 3KA/6KV, N, IP66
G20610-US	PS-INF-3.5KW, 208/240 (LL), 3KA/6KV, N, IP66
G20793-CN	PS-INF-3.5KW, 208/240 (LL), 6KA/12KV, N, IP66
G20793-US	PS-INF-3.5KW, 208/240 (LL), 6KA/12KV, N, IP66
G20794-CN	PS-INF-3.5KW, 208/240 (LL), 10KA/20KV, N, IP66
G20794-US	PS-INF-3.5KW, 208/240 (LL), 10KA/20KV, N, IP66

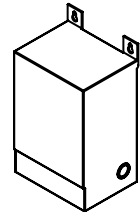
European Union, United Kingdom

PART NUMBER	DESCRIPTION
G20795	PS-INF-3.5KW, 230 (LN), 3KA/6KV, E/U, IP66
G20796	PS-INF-3.5KW, 230 (LN), 6KA/12KV, E/U, IP66
G20797	PS-INF-3.5KW, 230 (LN), 10KA/20KV, E/U, IP66

ACCESSORIES

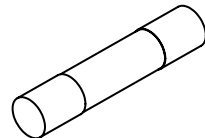
TRANSFORMER - 277 V AC TO 240 V AC

PART NUMBER	DESCRIPTION
210230	TRANSFORMER, 5KVA, 1PH, 277PRI, 120/240VSEC, 50Hz, ALUM



REPLACEMENT FUSES (ONE ADDITIONAL SET INCLUDED WITH EVERY PS-INF-3.5KW)

PART NUMBER	DESCRIPTION
231961	FUSE, 15A, 500VAC/DC, 1/4X1-1/4
232632	FUSE, 25A, 500VAC/DC, 1/4X1-1/4



1. Maximum power output 2200 W

PS-INF-3.5KW

INFINITY[®]
BY TECHNOLOGY

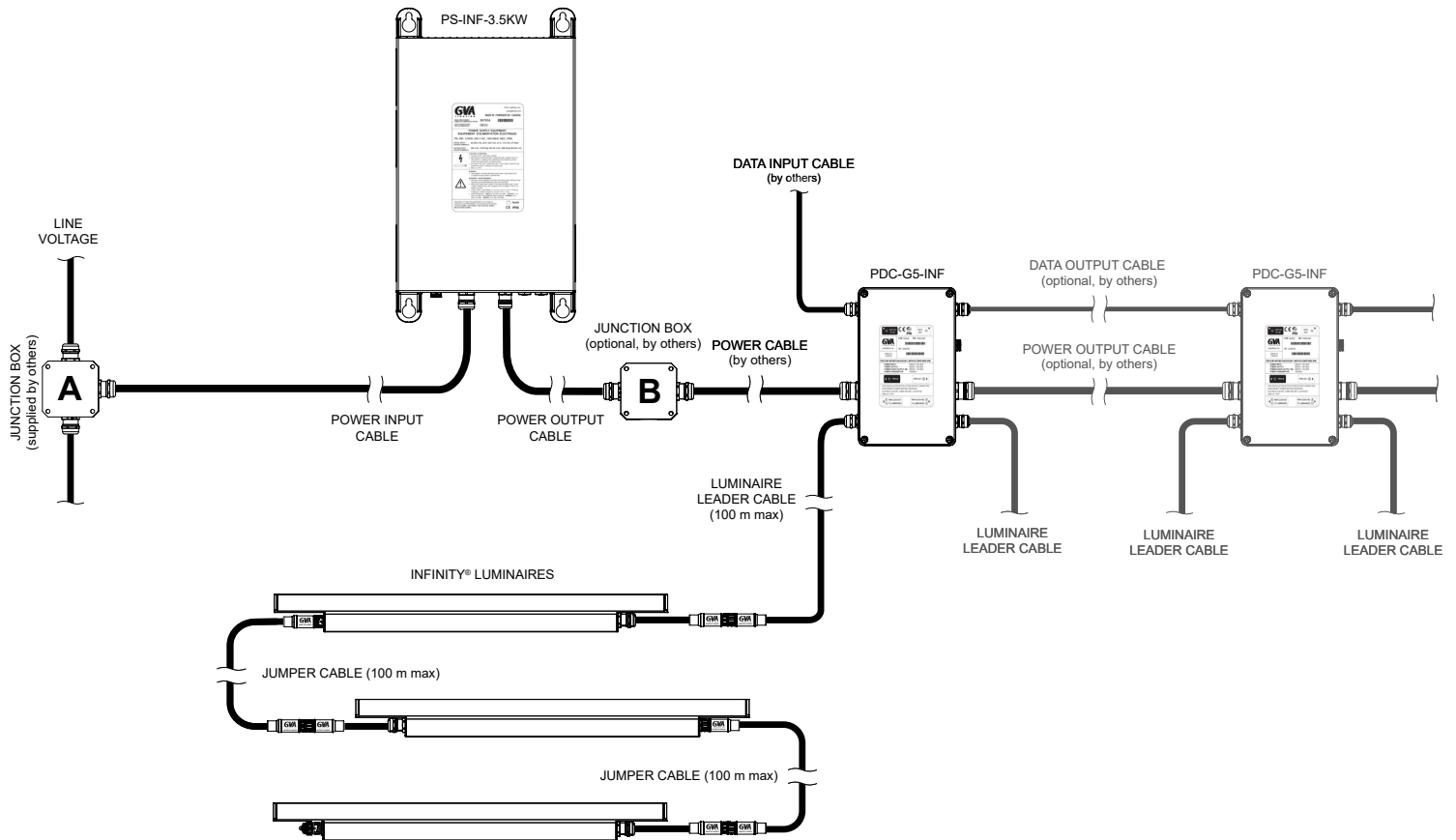
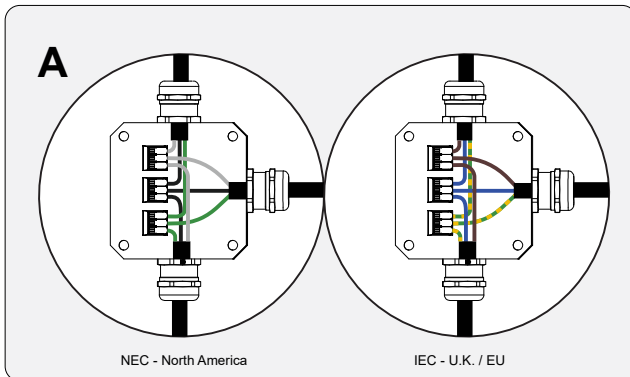
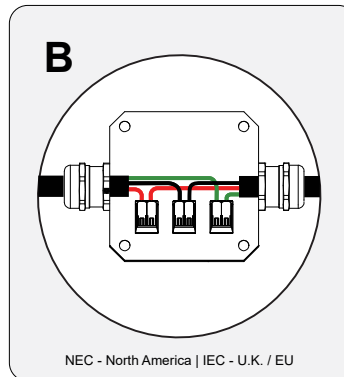


GVA
LIGHTING

OUTDOOR POWER SUPPLY FOR INFINITY[®] LIGHTING SYSTEMS

PRODUCT SPECIFICATION SHEET

TYPICAL SYSTEM DIAGRAM: PS-INF-3.5KW/IP66-120/208/230/240VAC



PS-INF-3.5KW

INFINITY[®]
BY TECHNOLOGY



GVA
LIGHTING

OUTDOOR POWER SUPPLY FOR INFINITY[®] LIGHTING SYSTEMS

PRODUCT SPECIFICATION SHEET

TYPICAL SYSTEM DIAGRAM: PS-INF-3.5KW/IP66-277VAC

