

# RGS-DT Battery Unit

6, 12 and 24 volts, NEMA-12 classified



## Harsh environment emergency lighting units steel, thermoplastic or fiberglass cabinets

The **RGS-DT** Series battery units are specifically designed for use in industrial facilities where equipment is exposed to dust, water, oil or corrosive substances. NEMA-12 classified to protect circuitry from harmful dust or liquid sprays, sealed and gasketed unit cabinets are available in steel, thermoplastic or fiberglass in a variety of sizes.

NEXUS



Made in Canada



## Features

- Solid-state pulse-type charger – current-limited, temperature-compensated, short-circuit proof and reverse-polarity protected.
- Unit comes standard with electronic lockout and brownout circuits
- Sealed dust-proof transfer relay, test switch and LED indicator lights
- Long-life, maintenance-free sealed lead acid battery
- Wide range of lampheads available  
Consult Ordering Information for complete list
- Standard 120/347Vac input voltage with line cord kit
- **NEXUS**<sup>®</sup> compatible (for more information on **NEXUS**<sup>®</sup>, please consult the factory)
- CSA C22.2 No. 141 certified

Project/Location		Date
Contractor		Prepared by
LUMACELL Model		

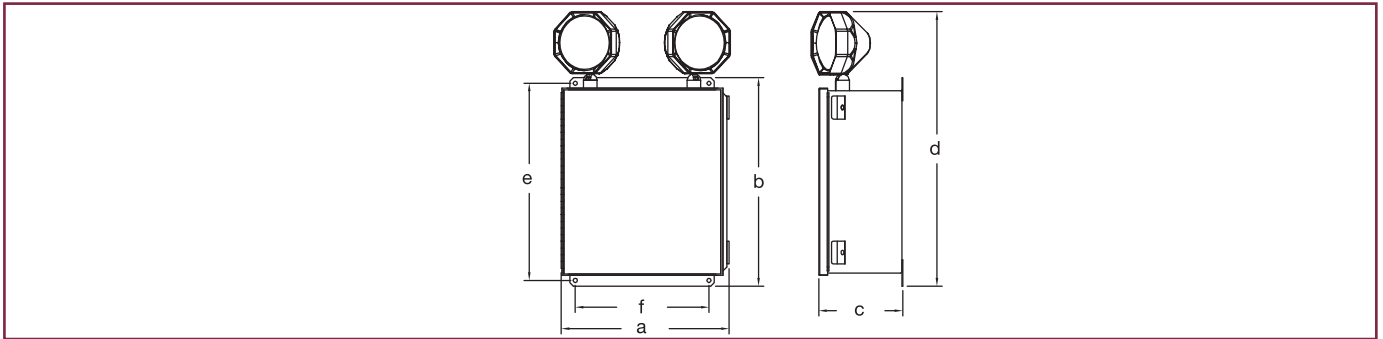


# RGS\*DT SERIES

## Wire Guard

460.0034-L Wall Mount

## Dimensions



Cabinet	Dimensions					
	a	b	c	d	e	f
<b>Thermoplastic Cabinet – size 1</b>	11 5/8 " (29.5 cm)	13 " (32.9 cm)	5 " (12.7 cm)	18 1/4 " (46.4 cm)	13 3/4 " (35.0 cm)	8 " (20.3 cm)
<b>Fiberglass Cabinet – size 2</b>	11 3/8 " (29.0 cm)	13 1/2 " (34.4 cm)	5 1/4 " (13.2 cm)	18 7/8 " (47.9 cm)	13 1/2 " (34.3 cm)	8 1/8 " (20.5 cm)
<b>Fiberglass Cabinet – size 3</b>	13 1/2 " (34.3 cm)	15 1/2 " (39.4 cm)	6 1/4 " (15.9 cm)	20 7/8 " (52.9 cm)	-	-
<b>Fiberglass Cabinet – size 4</b>	17 5/8 " (44.7 cm)	19 5/8 " (49.8 cm)	8 7/8 " (22.4 cm)	25 " (63.5 cm)	-	-
<b>Steel Cabinet – size 5</b>	10 3/4 " (27.4 cm)	13 7/16 " (34.1 cm)	5 1/4 " (13.4 cm)	18 1/2 " (47.1 cm)	12 5/8 " (32.0 cm)	9 " (22.7 cm)
<b>Steel Cabinet – size 6</b>	12 1/2 " (31.9 cm)	15 5/8 " (39.6 cm)	6 1/4 " (15.9 cm)	20 1/2 " (52.1 cm)	14 3/4 " (17.5 cm)	10 " (25.4 cm)

## Replacement Lamps

Model	Lampe Type	Voltage
570.0016-L	Tungsten (LH9W)	6V - 9W
570.0025-L	Tungsten (LH9W)	12V - 9W
570.0045-L	Tungsten (LH9W)	24V - 9W

Continue >>

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## Typical Specification

Supply and install a complete emergency lighting system as described herein and shown on the drawings.

The Lumacell Smart Diagnostic Micro controller board shall supply the rated load for a minimum of a 1/2 hour to 87.5% of the rated battery voltage. The unit shall be rated 120V or 347V, 60 Hz and be CSA listed. The unit shall have an output of \_\_\_\_\_ volts.

The charger shall be fully computer tested and its charge voltage factory set to  $\pm 1\%$  tolerance. Chargers with field-adjusted potentiometers are not acceptable. A pulse-type charger shall be employed to promote long battery life and reduce the potential for grid corrosion. The charger shall provide a continuous high charge to recharge the battery, when the battery is at full capacity, the charger will shut-off. Periodically the charger shall provide a pulse of energy to keep the battery topped off. The Pulse charge shall be current limited and precisely regulated by a micro-processing circuit, which samples the battery in relation to its temperature, state or charge

and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit, which will connect the battery when the AC circuit is activated, and an electronic brownout circuit, which will activate the emergency lights when utility power dips below 75% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the battery from the fused output circuit at the end of discharge. The unit shall self-test for 1 minute every 30 days, 10 minutes on the 6th month and 30 minutes every 12 months. The unit shall be capable of full recharge in compliance with CSA specifications. The unit shall be furnished with sealed dust tight relay, a test switch and diagnostic LED indicator lights to continuously monitor the status of the unit: Battery Failure, Battery Disconnected, Charger Failure, Lamp Failure, Service Alarm, AC "ON", Charger High Rate.

The unit shall be Lumacell model:  
\_\_\_\_\_.

Project/Location		Date
Contractor		Prepared by
LUMACELL Model		



## Power Consumption and Unit Rating **RGS\*DT SERIES**

Model	AC Specs	Wattage Capacity					
		30min	1h00	1h30	2h00	4h00	
<b>RGS36DT</b>	120/347 Vac	0.10/0.04 Amp	36	21	15	12	6
<b>RGS72DT</b>		0.22/0.08 Amp	72	42	30	24	12
<b>RGS108DT</b>		0.22/0.08 Amp	108	63	45	36	18
<b>RGS180DT</b>		0.22/0.08 Amp	180	105	75	60	30
<b>RG12S36DT</b>		0.09/0.03 Amp	36	21	15	12	6
<b>RG12S72DT</b>		0.15/0.06 Amp	72	42	30	24	12
<b>RG12S100DT</b>		0.34/0.12 Amp	100	58	42	33	17
<b>RG12S144DT</b>		0.40/0.14 Amp	144	84	60	48	24
<b>RG12S200DT</b>		0.41/0.14 Amp	200	117	83	67	33
<b>RG12S220DT</b>		0.41/0.14 Amp	220	120	90	72	36
<b>RG12S250DT</b>		0.41/0.14 Amp	250	144	100	83	42
<b>RG12S360DT</b>		0.43/0.15 Amp	360	210	150	120	60
<b>RG24S144DT</b>		0.55/0.20 Amp	144	84	60	48	24
<b>RG24S288DT</b>		0.67/0.23 Amp	288	168	120	96	48
<b>RG24S350DT</b>		0.67/0.23 Amp	350	200	144	120	60
<b>RG24S432DT</b>		0.67/0.23 Amp	432	250	180	144	72
<b>RG24S550DT</b>		0.88/0.33 Amp	550	320	230	180	90
<b>RG24S720DT</b>		0.88/0.33 Amp	720	420	300	240	120

## Ordering Information

Series	Capacity	Housing	# of Heads	Head Style/ Lamp Wattage	A.C. Voltage	Options	
<b>RGS= 6V</b>	36= 36 watts	<b>DT=</b> metal	<b>Blank=</b> no head	<b>LH9W=</b> large tungsten, 6V, 12V, 24V - 9 watts, wedge base	<b>Blank=</b> 120/347Vac input	<b>A=</b> ammeter	
	72= 72 watts	<b>DTF=</b>	1= one head	<b>LH18W=</b> large tungsten, 12V, 24V - 18 watts, wedge base		<b>ZB=</b> 240Vac input	<b>AT=</b> autotest
	108= 108 watts	thermoplastic	2= two heads	<b>LH25W=</b> large tungsten, 6V, 12V, 24V - 25 watts, DCB		<b>ZC=</b> 277Vac input	<b>CT=</b> cabtire
	180= 180 watts	<b>DTFG=</b> fiberglass		<b>LHQ8W=</b> large halogen, 6V, 12V - 8 watts, quartz bi-pin		<b>ZE=</b> 220Vac, 50hz input	<b>DPF6=</b> 6cct. fuse panel
<b>RG12S= 12V</b>	36= 36 watts			<b>LHQ12W=</b> large halogen, 6V, 12V - 12 watts, quartz bi-pin		<b>HHC=</b> remote test transmitter*	
	72= 72 watts			<b>LHQ20W=</b> large halogen, 6V, 12V, 24V - 20 watts, quartz bi-pin		<b>HTR=</b> heater & thermostat	
	100= 100 watts			<b>LHQ55W=</b> large halogen, 12V - 55 watts, quartz bi-pin		<b>LC=</b> line cord	
	144= 144 watts			<b>LHQ70W=</b> large halogen, 24V - 70 watts, quartz bi-pin		<b>LD=</b> lamp disconnect	
	200= 200 watts			<b>SB9W=</b> large tungsten, 6V - 9 watts, sealed beam		<b>LTS=</b> light activated test switch	
	250= 250 watts			<b>SB18W=</b> large tungsten, 6V, 12V - 18 watts, sealed beam		<b>NEX=</b> NEXUS system interface (6 & 12V only)	
	360= 360 watts			<b>SB25W=</b> large tungsten, 6V, 12V, - 25 watts, sealed beam		<b>RRT=</b> remote test receiver**	
<b>RG24S= 24V</b>	144= 144 watts			<b>QSB8W=</b> large halogen, 6V, 12V - 8 watts, quartz sealed beam		<b>TC=</b> teflon coated lens	
	288= 288 watts			<b>QSB12W=</b> large halogen, 6V, 12V - 12 watts, quartz sealed beam		<b>TD=</b> time delay (programmable)	
	350= 350 watts			<b>QSB20W=</b> large halogen, 6V - 20 watts, quartz sealed beam		<b>TL=</b> twist lock plug	
	432= 432 watts			<b>RB9W=</b> large rubber tungsten, 6V, - 9 watts, sealed beam		<b>TMBB=</b> AC/DC terminal block	
	550= 550 watts			<b>RB18W=</b> large rubber tungsten, 6V, 12V - 18 watts, sealed beam		<b>TMBD=</b> DC terminal block	
	720= 720 watts			<b>RB25W=</b> largerubber tungsten, 6V, 12V, - 25 watts, sealed beam		<b>TMBK=</b> AC terminal block	
				<b>RBQ8W=</b> large rubber halogen, 6V, 12V - 8 watts, quartz sealed beam		<b>V=</b> voltmeter	
				<b>RBQ12W=</b> large rubber halogen, 6V, 12V - 12 watts, quartz sealed beam		<b>ATN=</b> non-audible	
			<b>RBQ20W=</b> large rubber halogen, 6V - 20 watts, quartz sealed beam		* One per order. ** Remote test transmitter needed.		

**EXAMPLE: RGS36DT2LH9W**

# Glossary

A	<b>ammeter</b>	Used to measure the current being supplied to the battery while in charge mode.
AT	<b>Auto-Test</b>	Automatically tests and continuously monitors your emergency lighting unit. If a problem occurs, the unit will send a visual (flashing or blinking LED indicator) and audible warning. Complies with Fire Code requirements.
ATN	<b>Auto-Test, non-audible</b>	Automatically tests and continuously monitors your emergency lighting unit. If a problem occurs, the unit will send a visual (flashing or blinking LED indicator) warning. Complies with Fire Code requirements.
CT	<b>Cab-tire</b>	Unit supplied with a cab-tire cable used for special hardwire applications.
CW1	<b>cold weather, 120Vac</b>	120Vac input cold weather protection feature for applications where temperatures can reach -40° C
CW3	<b>cold weather, 347Vac</b>	347Vac input cold weather protection feature for applications where temperatures can reach -40° C
DPF6	<b>6cct. Fuse panel</b>	Used to facilitate the connection of multiple input load circuits in high power battery units.
HHC	<b>remote test transmitter</b>	Used to perform maintenance tests by means of radio transmitter along with a radio receiver (RRT option) on battery units that are out of reach.
HTR	<b>heather &amp; thermostat</b>	Like a heatblanket, used to keep internal temperature optimal for battery units that are installed in cold environments.
LC	<b>line cord (120V)</b>	When ordering a battery unit with the LC option, we supply and pre-install a line cord with a standard 3 prong 120V plug. Just hang the fixture and plug it in to a standard receptacle! Only available on 120V units.
LD	<b>lamp disconnect</b>	To disconnect the emergency lighting load in an area that is not in use during a prolonged power failure or while area is no longer being occupied.
LS	<b>Laser</b>	Used to remotely test battery units by means of pointing a laser at the battery unit.
LTS	<b>light activated test switch</b>	Used to remotely test battery units by pointing a flashlight at a photocell mounted on the bottom of a battery unit.
TC	<b>teflon coated lens</b>	A protective teflon coating that is applied to the glass lens of a lighting fixture to prevent broken shards from falling in the event the glass is accidentally broken or vandalised.
RRT	<b>remote test receiver</b>	Used to perform maintenance tests by means of radio receiver in conjunction with a transmitter(HHC option) on battery units that are out of reach. Simply point the receiver at the unit.
NEX	<b>Nexus system interface</b>	The NEXUS system interface is a computerized maintenance system for emergency lighting that, once programmed, will perform the tests, keep written records and send notification if anything needs to be fixed. One full system can address hundreds of units in as many buildings as you need from a single location.
T3	<b>15 minutes time delay</b>	Normally, when the a.c. is restored, all emergency lighting lamps are turned off. However, in some cases such as when metal halide lamps are used, it is possible that the general lighting will not be available for several minutes after the blackout (or brownout) period. Battery units with the T3 option will keep some energy in store to ensure that the emergency lighting stays on or comes back on for at least 15 minutes once the regular a.c. power has been restored.
TD	<b>time delay (programmable)</b>	Same as the T3 option but can be programmed for 5, 10, 15 or 20 minutes delay.
TP	<b>tamper proof screws</b>	Screws that require a special bit. Can be used on certain units to deny access to unauthorized personnel.
TL	<b>twistlock plug</b>	Used to facilitate the connection and removal of battery units for maintenance purposes.
TMBB	<b>a.c./d.c. terminal block</b>	Used to facilitate the connection of large gauge input cables.
TMBD	<b>d.c. terminal block</b>	Used to facilitate the connection of large gauge d.c. input cables.
TMBK	<b>a.c. terminal block</b>	Used to facilitate the connection of large gauge a.c. input cables.
V	<b>voltmeter</b>	Indicates voltage being supplied to the battery when in charge mode.