

# CARDIFF COMBO



Project:	
Type:	
Catalog #:	



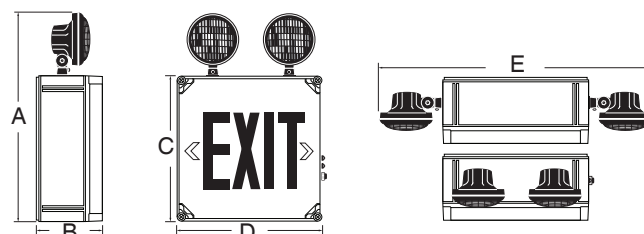
## SPECIFICATIONS: INTERNAL

Standard 120/277V input. The CARDIFF COMBO is designed with an internal, maintenance free, valve regulated sealed lead-acid battery or optional Ni-Cad battery providing emergency lighting duration of 90 minutes. Fuse protection is standard.

## SPECIFICATIONS: EXTERNAL

The CARDIFF COMBO comes standard in gray. Wall, ceiling or end mounting configurations are available. Ceiling and end mount versions come complete with a factory installed weatherproof steel canopy. Single or double face versions must be specified. Removable chevron arrows are standard on each unit along with an external LED status indicator and test switch. Four polycarbonate pressure screws firmly hold the face to the housing. Top or side mounted PAR36 style emergency heads are fully adjustable. CARDIFF COMBO is standard with PAR36 heads that are constructed of high-impact, black thermoplastic that has been sealed against moisture infiltration. Other options for heads are available.

## DIMENSIONS (in,mm.)



Series	A <sup>1</sup>	B	C	D	E <sup>1</sup>
Single Face	17 <sup>1/2</sup> " (445mm)	7" (178mm)	11 <sup>3/4</sup> " (298mm)	11 <sup>3/4</sup> " (298mm)	23 <sup>1/4</sup> " (591mm)
Double Face	17 <sup>1/2</sup> " (445mm)	5" (127mm)	11 <sup>3/4</sup> " (298mm)	11 <sup>3/4</sup> " (298mm)	23 <sup>1/4</sup> " (591mm)

NOTE 1: Dimensions A & E will vary depending on which style of heads are chosen.

## ORDERING INFORMATION

Series	Operation	Pb-A (Capacity) <sup>1</sup>	Ni-Cd <sup>2</sup> (Capacity)	LED	Face No.	Mounting	Emergency Heads	Lamps	Options
CAR-C	S (6V)	12 (6V, 12V)	22 (6V)	RD (red)	1 (single)	W (wall)	0 (no heads)	See lamps	AT (autotest)
	I (12V)	18 (6V)	42 (6V, 12V)	GN (green)	2 (double)	C (ceiling)	1JAW <sup>3</sup> (one MR16 head)	selection below	NC <sup>5</sup> (nickel-cadmium battery)
	C (24V)	27 (6V, 12V)	54 (6V)			E (end)	2JAW <sup>3</sup> (two MR16 heads)		TD <sup>6</sup> (time delay - 0, 5, 10, 15 min)
		36 (6V, 12V)	90 (6V, 12V)				1TESRD (One head, HO)	IH <sup>7</sup> (internal heater)	
		60 (6V, 12V)	100 (24V)				2TESRD (Two heads, HO)	IRT <sup>8</sup> (infrared testing)	
		72 (6V, 12V)					1TESSQ (One head, HO)	SMH (side mount heads)	
		100 (6V)					2TESSQ (Two heads, HO)	PK (pendant kit)	
		120 (6V, 12V)					1LR <sup>4</sup> (single PAR36)	SW (special wording)	
		140 (12V)					2LR <sup>4</sup> (double PAR36)	BPG6 <sup>9</sup> (wireguard)	
							3LR <sup>4</sup> (triple PAR36)	FP (food prep lens)	
								BZ (audible alarm - buzzer)	

NOTE 1: Certain capacities and/or options may require a larger housing.  
 NOTE 2: Nickel-cadmium. Must select NC from options when selecting Ni  
 NOTE 3: JAW is NEMA 4X rated.

NOTE 4: Heads are supplied standard weatherproof.

NOTE 5: Must select NC from options when selecting Ni-Cd. Select wattage/voltage from Ni-Cd column.  
 NOTE 6: Must specify 5, 10 or 20 mins and AC Voltage.  
 NOTE 7: Must specify AC Voltage.  
 NOTE 8: Available only if ordered with no heads. HHC (controller for IRT) should be ordered separately  
 NOTE 9: Wireguard for CAR-C wall mount with top mounted heads only.

## LAMP SELECTION

	6V	12V	24V
Incandescent	5.4, 7.2, 9W	9, 12, 18W	9, 18W
Halogen (H)	10, 12, 20W	12, 20, 35W (55W - PAR36 only)	10, 12, 20, 50W
MR16	6, 10W	10, 12, 20, 35, 50W	12, 20, 35, 50W
MR16 LED	5W, 7W	2, 5, 7W	5, 7W
TES	N/A	30W	30W







## SPECIFICATIONS: ELECTRICAL

**BATTERY:** The CARDIFF COMBO is designed with an internal, maintenance free, valve regulated sealed lead-acid battery providing emergency lighting duration of 90 minutes. Recharge time of the battery is forty-eight (48) hours. The battery operating temperature without the internal heater/thermostat option is 40°C maximum and 10°C minimum; with the internal heater (IH) option the minimum battery operating temperature is -20°C.

**CIRCUIT:** The CARDIFF COMBO utilizes a high-efficiency two stage charger providing precise float voltage control with low voltage disconnect protection. All components used in the circuitry are temperature compensated. The charger also has brownout and short circuit protection. Charger status is easily determined via a dual diagnostic LED display which indicates AC/ON and High Charge. An external push button test switch allows maintenance personnel to quickly determine the operational status of the unit and lamp load.

## AUTOTEST

The CARDIFF COMBO Autotest feature automatically monitors the functional operation of the unit. Autotest monitors the operation of the lamps, battery and circuitry and displays any alerts. Periodic emergency tests, up to ninety (90) minutes duration are simulated to ensure proper operation during an actual power failure. Operating status is visually indicated by multi-function LED indication.

-  Steady Green : Normal Operation
-  Flashing Green : AC Interruption in Last 48 Hours
-  Steady Yellow : Lamp Circuit Malfunction
-  Flashing Yellow : Auto-test or Manual Test in Progress
-  Steady Red : Battery Failed Testing
-  Flashing Red : Battery Disconnected or Charger Malfunction

## SPECIFICATIONS: EXTREME CLIMATE DESIGN

The CARDIFF COMBO has been designed to perform in applications where the climate would punish any standard sign. The entire internal cavity of the sign is protected from moisture ingress by an extremely resilient silicone gasket. The liquid gasketing is "hot-bonded" to the lens during the manufacturing process. This procedure eliminates any chance of the gasketing to become dry and pull away from the lens. The gasketing always holds its original form and has "memory retention" so that it effectively and consistently protects the CARDIFF COMBO from moisture. The CARDIFF COMBO can also be equipped with an optional thermostatically controlled heater for cold environments.

## SPECIFICATIONS: MECHANICAL

The CARDIFF COMBO housing is constructed from durable, corrosion resistant fiberglass. The NEMA 4X housing is fully gasketed for damp and wet locations with a hot-bonded silicone gasket. Exit face(s) are made from a high clarity, clear polycarbonate that has been painted white on the internal side only, making the unit highly scratch resistant. Custom face colors and special wording / graphics are available, please specify.

## SANITATION LISTED

The CARDIFF COMBO is sanitation approved. The Intertek verified splash zone listing is equivalent to the NSF standard 2, meeting the rigorous sanitation, electrical safety and performance standards of food service environments.

## MODEL RATING GUIDE Pb-A (CAPACITY)

Model	Input Voltage	Wattage Rating 90 Minutes
CAR-C-6-12	6	12
CAR-C-6-18	6	18
CAR-C-6-27	6	27
CAR-C-6-36*	6	36
CAR-C-6-60	6	60
CAR-C-6-72*	6	72
CAR-C-6-120 <sup>1</sup>	6	120
CAR-C-12-12	12	12
CAR-C-12-27	12	27
CAR-C-12-36*	12	36
CAR-C-12-65	12	65
CAR-C-12-72*	12	72
CAR-C-12-120 <sup>1</sup>	12	120

\*Available in single or double face.  
Note 1: Requires a larger cabinet size. Please contact factory.

## MODEL RATING GUIDE Ni-Cd (CAPACITY)

Model	Input Voltage	Wattage Rating 90 Minutes
CAR-C-6-22*	6	22
CAR-C-6-42*	6	42
CAR-C-6-54 <sup>1</sup>	6	54
CAR-C-6-90* <sup>1</sup>	6	90
CAR-C-12-45*	12	45
CAR-C-12-90 <sup>1</sup>	12	90
CAR-C-12-130	12	130

\*Available in single or double face.  
Note 1: Requires a larger cabinet size. Please contact factory.

## WARRANTY

The CARDIFF COMBO comes with a 3-year factory warranty. Lamps are not covered under the warranty. Deliberate damage, misuse, improper installation effectively cancel the warranty.