CHLORIDE SYSTEMS

TYPE: _____

CATALOG NO.: _____

TCL Series

High Capacity Steel Emergency Lighting Units
12 Volt, 150 to 450 Watts
Wet Cell Lead Calcium Battery

General Description

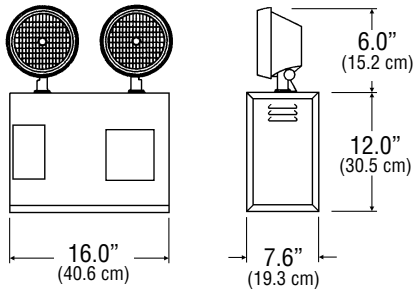
The TCL Series provides functional emergency lighting in a variety of wattages up to 450 watts. High performance electronics and rugged 18 gauge steel construction ensure long-term life safety reliability.

Illumination

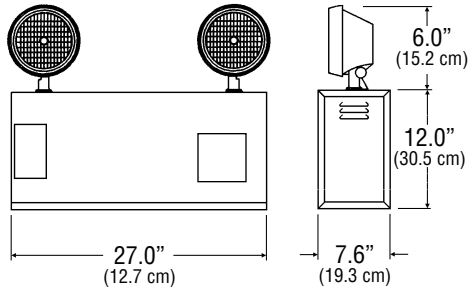
Illumination is accomplished with up to three lamp heads mounted on the top of the unit. The most popular lamp head for use with the TCL Series is the "D" Series round sealed beam Par 36 tungsten lamp head. The "D" head is available up to 30 watts.

Dimensions

TCL150, TCL200



TCL300, TCL450



Dimensions are approximate and subject to change.

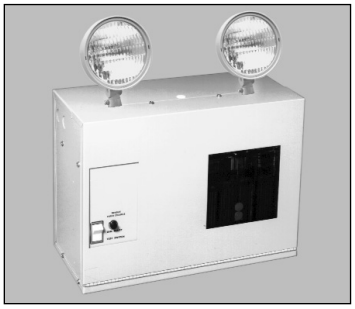
Housing

Constructed of 18 gauge steel with a tan epoxy powder coat finish.

Knockouts provided for mounting up to three lamp heads.

Bi-color LED charge monitor/indicator and a "press-to test" switch are located on the front of the cabinet.

Choice of wedge base, sealed beam tungsten, or halogen lamp heads



SHOWN: TCL150DE2

Electronics

120/277 VAC dual voltage input with surge-protected, solid-state circuitry provides for a reliable charging system.

Charging system is complete with low voltage disconnect, AC lockout, brownout protection, AC indicator lamp and test switch.

Includes two fused output circuits.

Utilizes a fully automatic voltage regulated two-rate current limited solid-state charger -- initially provides a high rate charge upon restoration of AC power, and provides trickle charge to maintain batteries at full capacity once float voltage is attained.

Optional ACCU-TEST Self Diagnostics includes an automatic 3 minute discharge test every 30 days. A manual test is available from 1 to 90 minutes.

Warranty

Three year full electronics warranty

One year full plus four year prorated battery warranty

Battery

Low maintenance, free electrolyte, wet cell, lead calcium battery

Specific gravity disk indicators show relative state charge at a glance

Operating temperature range of battery is 65°F (19°C) to 85°F (30°C)

Battery supplies 90 minutes of emergency power

Code Compliance

UL 924 listed

NFPA 70 and NFPA 101, NEC, BOCA, OSHA and IBC illumination standards

Electrical Specifications

Input power requirements

120 VAC - 0.66 amps, 80 watts
277 VAC - 0.30 amps, 80 watts

ORDERING INFORMATION (EXAMPLE: TCL150DE2)

TCL				—	
SERIES	DC WATTAGE	LAMP HEADS	# OF HEADS		FACTORY INSTALLED OPTIONS [1]

TCL = 12 Volt

12 Volt (Includes standard voltmeter)
150 = 150 Watt
200 = 200 Watt
300 = 300 Watt
450 = 450 Watt

12 Volt
DNY = 12 Watt, Tungsten
DE = 28 Watt, Tungsten
DK = 25 Watt, Tungsten
DG = 30 Watt, Tungsten

(Suggested lamp heads listed above. Refer to the Accessories Section for additional lamp head choices.)

3 = Three
2 = Two
1 = One

A = Ammeter [2]
ACF1 = 120 VAC Fuse
ACF2 = 277 VAC Fuse
ACP1 = 120 VAC Power Switch
ACP2 = 277 VAC Power Switch
AD = ACCU-TEST Self-Diagnostics
ADAL = ACCU-TEST with Alarm
ADTD = ACCU-TEST with Time Delay [3]
DCP = DC Power Switch
EX = Special Input Transformer (specify voltage and frequency)
TD1 = 120 VAC Time Delay [3]
TD2 = 277 VAC Time Delay [3]
V = Voltmeter [2]
W = White Housing

ACCESSORIES (order as a separate line item)
LMSHELF = Mounting Shelf 300-450W
MXSHELF = Mounting Shelf 150-200W

Notes:
1) Some option combinations may impact UL listing. Consult factory for specifics.
2) Not available with AD, ADAL, or ADTD options.
3) 15 minute delay.

Specification Data for TCL Series Steel Emergency Lighting Units

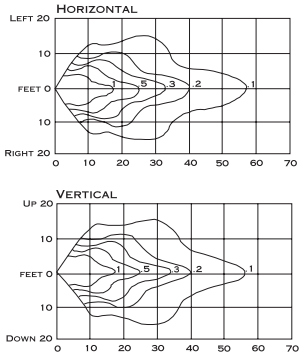
Housing

18 gauge steel housing with a tan epoxy powder coat finish.

Knockouts provided for mounting up to three lamp heads.

The suggested lamp head is the "D" Series round sealed beam Par 36 tungsten. To order lamp heads other than the suggested "D" head, refer to Chloride Accessories Section.

Lamp Head Photometrics
(For DK, suggested head for TCL)



Electronics

120/277 VAC dual voltage input with surge-protected, solid-state charging circuitry provides for a reliable charging system. The charging system is furnished with low voltage disconnect, AC lockout, brownout protection, AC indicator lamp and test switch.

The low voltage disconnect (LVD) feature will disconnect the battery prior to an unacceptable deep discharge, but not before the required 90 minute emergency operation.

The AC lockout feature prevents battery drain prior to the initial energizing of utility power, and allows the installer to complete all wiring and electrical connections without energizing the emergency circuit.

The brownout protection circuitry will automatically switch the unit into the emergency mode if the utility voltage sags below 20% of nominal.

Battery charging circuitry is entirely solid-state, and utilizes a fully automatic, voltage regulated charger. Battery recharge time after full discharge is less than the required UL 924 standard.

Line sensitive electronics cause an instantaneous transfer to battery power if utility power is lost, or a brownout condition is detected. When line voltage is present and stabilized, the transfer circuitry switches back to normal operation and begins recharging the battery. The transfer circuitry can be tested via a momentary test switch located on the housing.

Self-Diagnostics

The ACCU-TEST Self-Diagnostics option conducts automatic and manual tests, and indicates real time status of the lamp, battery and charger via LED indicator lamps. Automatic tests include: Systems analysis every 10 seconds, with actual load tests performed for a 3 minute duration every 30 days. A manual tests is available from 1 to 90 minutes.

Battery

Low maintenance, free electrolyte, wet cell, lead calcium battery.

Standard sustained emergency operation is for 90 minutes with the illumination source providing full light output.

The suggested operating temperature range for lead calcium batteries is 65°F (19°C) to 85°F (30°C) and should provide a service life of 5 years.

Electrical Specifications

Input power requirements

120 VAC - 0.66 amps, 80 watts
277 VAC - 0.30 amps, 80 watts

Code Compliance

The TCL Series meets or exceeds all performance standards as required by UL 924, NFPA 70, NFPA 101, NEC, BOCA, OSHA and IBC.

Operation

DC Voltage	Unit	Suggested Lamp Head	Watts to 87½ of Rated Voltage*			
			1½ hrs.	2 hrs.	4 hrs.	8 hrs.
12	TCL150	DK	150	112.5	57	30
	TCL200	DK	200	150	96	34
	TCL300	DK	300	225	114	60
	TCL450	DK	450	337.5	171	90

* Per NEC Specifications

Suggested Specification

Furnish and install Chloride's emergency lighting unit model _____. The unit shall be constructed to meet Underwriter's Laboratories, Inc. Standard #924 and the National Electrical Code (NEC).

INSTALLATION AND OPERATION - Unit shall be easily field connected to a 120 or 277 VAC, 60 hertz, unswitched power source. Installation must comply with the NEC as well as other applicable codes. Upon utility power failure or brownout, the unit shall automatically transfer to battery power and maintain the required illumination level for a minimum period of 90 minutes. Upon restoration of utility power, the charger shall restore the battery to full charge within UL 924 requirements following a rated discharge of not more than 90 minutes.

CHARGER - Product shall utilize a fully automatic, voltage regulated, two-rate current limited solid-state charger. The charging system shall maintain the battery at full capacity without the need for periodic exercising or equalization. The following features shall be standard: Low voltage disconnect (LVD), brownout protection and AC lockout.

BATTERY - The battery shall be a low maintenance, free electrolyte, wet cell, lead calcium battery. The lead calcium battery shall provide trouble-free operation in temperatures up to 85°F (30°C).

HOUSING - The unit housing shall be constructed of 18 gauge steel with a tan epoxy powder coat finish.

ISO 9001 CERTIFIED
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