

# HAZARDOUS EXPLANATION OF OPTIONS AND TERMS

## EXPLANATION OF OPTIONS

**F = FUSING** (Not available with multivolt or dual voltage.)  
 (Not available 208, 240, 480, 600 volt with  $\text{UL}$ )  
 If specified, fuse(s) should be rated three times maximum current but less than branch circuit breaker (minimum of 5 amps for any fuse). Luminaires supplied with fuse holder(s) will accept a fuse such as Bussman KTK type. Factory installed fuse holder includes one fuse for 120V, 277V, 347V or two fuses for 208V, 240V, 480V.

**Q = AUTOMATICALLY SWITCHED QUARTZ (TIME DELAY)**  
 Most luminaires can be provided with automatically switched quartz/instant-on safety lighting where momentary power interruptions or extreme voltage dips can extinguish an HID lamp. A single-ended quartz lamp is placed in the same optical with the HID lamp. The quartz lamp will remain on until the HID lamp strikes and reaches approximately 60% of full light output. This also means that the quartz lamp will come on when the luminaire is initially energized and remain on until the HID lamp reaches 60% light output.

**Caution should be utilized when sizing branch circuits for luminaires with this option since the luminaire will draw additional current during the warm-up period while both lamps (quartz and HID) are in operation.**

Wiring for the quartz lamp is internal to the ballast assembly and the 120 volts to operate the quartz lamp is supplied by the ballast.

The 400 watt luminaires have a socket for one 250 watt single-ended DC (Double Contact) bayonet base quartz lamp. The 250 watt and lower wattage luminaires have a socket for one 150 watt single-ended DC bayonet base quartz lamp. Refer to TEMPERATURE PROFILE DATA pages for Limitations.

**U = UL1598 OUTDOOR SALT WATER (formerly UL595)/UL844**

Equipment is UL1598 Outdoor Salt Water Marine Listed, Suitable for Outdoor Salt Water Marine Use, as well as UL844 Listed for Hazardous Locations.

## EXPLANATION OF OTHER TERMS USED

### MULTIVOLT

The multivolt choice under "Voltage" in Ordering Number Logic tables means that the customer can make the necessary connections to operate the luminaire at any one of four voltages - 120, 208, 240 or 277.

### HOT RESTART

The hot lamp restart feature is a ballast choice for some HPS luminaires. (See product pages for availability and ordering information.) During initial energization (cold start) HPS lamps have a two to three minute warm-up period. After stabilization, a momentary power interruption may cause the lamp to go out and it will not restrike for some period of time, approximately one minute for HPS lamps. Under normal conditions there is a delay of two to three minutes before full light output is achieved after a momentary power interruption. "Hot restart" will restart an HPS lamp instantly and at essentially the same lumen output even after outages of up to ten (10) seconds. For outages of up to thirty (30) seconds, it will restart the HPS lamp instantly but at slightly reduced lumens for a short period of time. This feature does not affect, or accelerate, initial cold start.

### HAZARDOUS LOCATION CLASSIFICATION

The classification of a given area as to Class, Division, and Group is solely the judgement of **THE OWNERS, INSURANCE COMPANY AND THE AUTHORITY HAVING JURISDICTION.**

## TEMPERATURE CODE TABLE

The temperature Code Table Figure 1 matches identification numbers with the maximum temperature range in degrees Celsius (C) that they represent. These codes are used in luminaire Temperature Profile Data tables for GE hazardous location luminaires.

Figure 1

TEMPERATURE CODE TABLE	
Identification Range Number	Maximum Temperature Degrees C
T1	450
T2	300
T2A	280
T2B	260
T2C	230
T2D	215
T3	200
T3A	180
T3B	165
T3C	160
T4	135
T4A	120
T5	100
T6	85

## TEMPERATURE CONVERSION FORMULAS

Celsius to Fahrenheit	Fahrenheit to Celsius
$F = 1.8C + 32$	$C = \frac{F - 32}{1.8}$

## NEMA DECAL

GE puts a NEMA identification decal on the outside of the ballast housing of each hazardous location luminaire. The color of the decal indicates the light source and the number, the lamp wattage (see Figure 2).

Figure 2

NEMA DECAL	
Color Coding/Light Source	Numeric Coding/Wattage
Yellow = High Pressure Sodium	05 = 50 07 = 70
Red = Metal Halide	10 = 100 15 = 150
Light Blue = Mercury	17 = 175 20 = 200 25 = 250 40 = 400 75 = 750

## EFFECT OF CHEMICALS AND SOLVENTS ON ACRYLIC AND POLYCARBONATE RESIN REFRACTORS

Acrylic is resistant to dilute solutions of strong acids and alkalis, aliphatic petroleum oils, aliphatic hydrocarbons, and dilute alcohols. It is not resistant to concentrated alkalis and oxidizing acids, the lower ketones, ester, aromatic and halogenated hydrocarbons, and lacquer thinners. Naturally, the resistance to the various chemicals will vary with the concentration and the temperature of the environment.

Polycarbonate resin has good resistance at room temperature to water, dilute inorganic and organic acids, solutions of neutral and acid salts, vegetable oils, aliphatic hydrocarbons, ethers and alcohols. It is readily dissolved by certain halogenated solvents such as methylene chloride, 1, 2 dichloroethane, and chloroform. Loss of properties can result from contact with low molecular weight aldehyde and ethers, ketones, esters, aromatic hydrocarbons, and perchlorinated hydrocarbons. Chemical attack occurs in contact with alkali, alkaline salts and amines.