Crouse-Hinds

Ex d, Weatherproof



Introduction

These certified beacons have been designed for use in harsh environmental conditions. The stainless steel or marine grade alloy enclosures are suitable for use offshore or onshore, where lightweight combined with corrosion resistance and strength is required. Units can be painted to customer specification and fitted with identification labels.

LED version available, offering extended lifetimes.

A high temperature version is available - contact MEDC for details.

Stainless steel, one of the most durable materials available on the market, is both hard wearing and corrosion resistant, increasing the life of products in harsh environments and therefore reducing maintenance costs.

Features

- Zone 1 and Zone 2 use.
- Ex d IICT4/T5/T6.
- ATEX approved Ex II 2GD.
- BASEEFA certified.
- IECEx certified Gb, Db.
- UL Listed for USA and Canada: Class I, Div. 1, Groups C & D. Class I, Zone 1 AExd IIB.
- CSA certified.
- CUTR certified*.
- Chinese (CQST) certified.
- Brazilian (Inmetro) certified.
- IP66 and IP67.
- Certified temperature: -55°C to +70°C*.
- High temperature version (up to 85°C) available.†
- Stainless steel or marine grade alloy.
- Xenon or LED versions.
- Various lens colours.
- Optional lens guard.
- Telephone or relay initiated.

*Depending on version. †Please contact MEDC Technical Sales.



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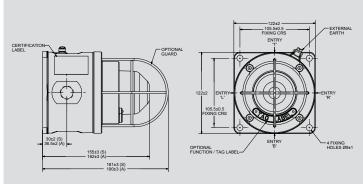
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Certification and Specification

Class I, Div 1. Group D.CUTR Ex d:HXB: 1Ex d IIC T5/T6 Gb, Ex tb IIIC T65°C/ T80°C/ T95°C Db.LED: 1Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db.NUBLED: 1Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T80°C/ T95°C Db.Inmetro Ex d:Exd IIC T4/T5/T6 Gb, Ex tb IIIC T65°C/ T80°C/ T95°C Db.LED: Ex d IIC T4/T5/T6 Gb, Ex tb IIIC T55°C/ T70°C Db.XBT: Ex d IIC T4/T5/T6 Gb, Ex tb IIIC T55°C/ T70°C Db.XBT: Ex d IIC T4/T5/T6 (HXB only).Material:HXBS, XBTS and LEDS – Grade 316 ANC4B Stainless Steel.HXBA, XBTA & LEDA – LM25 TF Marine Grade Alloy.Lens – Glass.UL version available only in marine grade alloy.CSA version available only in stainless steel.Finish:Epoxy paint finish as standard or to customer specification.Certified Temp:ATEX/IECEXHXB = -55°C to +70°C (T5) -55°C to +55°C (T6) XBT = -55°C to +40°CUL wersion available only in marine grade alloy.CSA version available only in marine grade alloy.CSA version available only in tainless steel.Finish:Epoxy paint finish as standard or to customer specification.Certified Temp:ATEX/IECEXHXB = -55°C to +70°C (T5) -55°C to +55°C (T4)CSAHXB = -55°C to +55°C <th< th=""><th>Ocitinuo</th><th>alion and opecification</th></th<>	Ocitinuo	alion and opecification					
$\label{eq:class} I, Div 1, Groups C & D. \\Class I, Zones 1. (HXB & XBT only). \\CSA: Cert no. 96406. (HXB only). \\Certified to: C22.2 Nos 0, 0.4, 0.5, 9, 30-M1986, 94-M91, 137-M198 \\Class I, Div 1. Group D. \\CUTR Ex d: HXB: 1Ex d IIC 75/T6 Gb, Ex tb IIIC T65°C/ T80°C/ 795°C Db. \\LED: 1Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db. \\XBT: 1Ex d IIC T4 Gb, Ex tb IIIC T65°C/ 780°C/ 795°C Db. \\LED: Ex d IIC T4/T5/T6 Gb. \\HXB: Ex d IIC T4/T5/T6 Gb. \\HXB: Ex d IIC T6 Gb, Ex tb IIIC T55°C/ 770°C Db. \\LED: Ex d IIC T6 Gb, Ex tb IIIC T55°C/ 770°C Db. \\LED: Ex d IIC T6 Gb, Ex tb IIIC T55°C/ 770°C Db. \\LED: Ex d IIC T6 Gb, Ex tb IIIC T55°C/ 770°C Db. \\LED: Ex d IIC T4/T5/T6 Gb. \\HXB: Ex d IIC T4/T5/T6 Gb. \\HXB: Ex d IIC T4/T5/T6 Gb. \\HXB: Ex d IIC T4/T5/T6. (HXB only). \\Material: HXBS, XBTS and LEDS - Grade 316 ANC4B Stainless Steel. HXBA, XBTA & LEDA - LM25 TF Marine Grade Alloy. Lens - Glass. UL version available only in marine grade alloy. CSA version available only in stainless steel. Finish: Epoxy paint finish as standard or to customer specification. Certified Temp: ATEX/IECEx HXB = -55°C to +70°C (T5) -55°C to +55°C (T6) LED = -55°C to +55°C (T6) LED = -55°C to +40°C UL HXB = -50°C to +40°C UL HXB = -55°C to +70°C XBT = -40°C to +85°C GOST 'R' HXB = -55°C to +70°C Weight: HXB $& LEDS - 3.8kg each (approx). HXBA & LEDA - 2kg. each (approx). HXBA & LEDA - 2kg. each (approx). HXBA & LEDA - 2kg. each (approx). Ingress Protection: IP66 & IP67. Entries: Up to 4 x M20 / M25 ISO or 1/2" / 3/4" NPT. Terminals: HXB & XBT - 6 off suitable for up to 2.5mm2 cable. LED - 6 off suitable for up to 2.5mm2 cable. $		Certified to: EN60079-0, EN60079-1, EN60079-31. HXB: Ex II 2GD, Ex d IIC T5/T6 Gb, Ex tb IIIC T65°C/ T80°C/ T95°C Db. LED: Ex II 2GD, Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db. XBT: Ex II 2GD, Ex d IIC T4 Gb, Ex tb IIIC T110°C Db. Cert. no. IECEx BAS 09.0059. Certified to: IEC60079-0, IEC60079-1, IEC60079-31. HXB: Ex d IIC T5/T6 Gb, Ex tb IIIC T65°C/ T80°C/ T95°C Db. LED: Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db.					
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	-	Listing no. E187894. Class I, Div 1, Groups C & D.					
LED: 1Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db. XBT: 1Ex d IIC T4 Gb, Ex tb IIIC T110°C Db. Russian Fire Alarm approved.Inmetro Ex d:Exd IIC T4/T5/T6 Gb. HXB: Ex d IIC T4/T5/T6 Gb, Ex tb IIIC T65°C/ T80°C/ T95°C Db. LED: Ex d IIC T6 Gb, Ex tb IIIC T65°C/ T70°C Db. XBT: Ex d IIC T4 Gb, Ex tb IIIC T10°C Db.COST:Exd IIC T4/T5/T6 Gb. HXB: Ex d IIC T4/T5/T6. (HXB only).Material:HXBS, XBTS and LEDS – Grade 316 ANC4B Stainless Steel. HXBA, XBTA & LEDA – LM25 TF Marine Grade Alloy. Lens – Glass. UL version available only in marine grade alloy. CSA version available only in stainless steel.Finish:Epoxy paint finish as standard or to customer specification.Certified Temp:ATEX/IECExHXB = -55°C to +70°C (T5) -55°C to +55°C (T6) LED = -55°C to +55°C (T6) LED = -55°C to +55°C (T6) UL HXB = -55°C to +65°C (T4) CSA HXB = -55°C to +85°C (T4) CSA HXB = -55°C to +55°C C to +40°C UL HXB = -55°C to +55°C (T0) XBT = -40°C to +85°C 		Certified to: C22.2 Nos 0, 0.4, 0.5, 9, 30-M1986, 94-M91, 137-M1981.					
HXB: Ex d IIC T5/T6 Gb, Ex tb IIIC T65°C/ T80°C/ T95°C Db. LED: Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db. XBT: Ex d IIC T4 Gb, Ex tb IIIC T110°C Db.CQST:Exd IIC T4/T5/T6. (HXB only).Material:HXBS, XBTS and LEDS – Grade 316 ANC4B Stainless Steel. HXBA, XBTA & LEDA – LM25 TF Marine Grade Alloy. Lens – Glass. UL version available only in marine grade alloy. CSA version available only in stainless steel.Finish:Epoxy paint finish as standard or to customer specification.Certified Temp:ATEX/IECExHXB = -55°C to +70°C (T5) -55°C to +55°C *(T6) XBT = -55°C to +55°C *(T6) XBT = -55°C to +40°CWeight:HXBS & LEDS – 3.8kg each (approx). HXBA & LEDA – 2kg. each (approx).Ingress Protection:IP66 & IP67.Entries:Up to 4 x M20 / M25 ISO or 1/2" / 3/4" NPT.Terminals:HXB & XBT – 6 off suitable for up to 2.5mm² cable. LED – 6 off suitable for up to 2.5mm² cable.		LED: 1Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db. XBT: 1Ex d IIC T4 Gb, Ex tb IIIC T110°C Db.					
Material:HXBS, XBTS and LEDS - Grade 316 ANC4B Stainless Steel.HXBA, XBTA & LEDA - LM25 TF Marine Grade Alloy. Lens - Glass. UL version available only in marine grade alloy. CSA version available only in stainless steel.Finish:Epoxy paint finish as standard or to customer specification.Certified Temp:ATEX/IECExHXB $-55^{\circ}C$ to $+70^{\circ}C$ (T5) 	Inmetro Ex d:	HXB: Ex d IIC T5/T6 Gb, Ex tb IIIC T65°C/ T80°C/ T95°C Db. LED: Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db.					
$\begin{array}{rcl} HXBA, XBTA \& LEDA - LM25 \ TF \ Marine \ Grade \ Alloy.\\ Lens - Glass.\\ UL \ version \ available \ only \ in \ marine \ grade \ alloy.\\ CSA \ version \ available \ only \ in \ stainless \ steel.\\ \hline \\ \hline$	CQST:						
$ \begin{array}{c c} \textbf{Certified Temp:} & \textbf{ATEX/IECEx} & HXB = & -55^{\circ}\text{C} \ \text{to} + 70^{\circ}\text{C} \ (\text{T5}) \\ & -55^{\circ}\text{C} \ \text{to} + 55^{\circ}\text{C} \ (\text{T6}) \\ & \text{LED} = & -55^{\circ}\text{C} \ \text{to} + 55^{\circ}\text{C} \ (\text{T6}) \\ & \text{XBT} = & -55^{\circ}\text{C} \ \text{to} + 85^{\circ}\text{C} \\ & \textbf{UL} & HXB = & -55^{\circ}\text{C} \ \text{to} + 40^{\circ}\text{C} \\ & \textbf{UL} & HXB = & -55^{\circ}\text{C} \ \text{to} + 70^{\circ}\text{C} \\ & \text{XBT} = & -40^{\circ}\text{C} \ \text{to} + 85^{\circ}\text{C} \\ & \textbf{GOST} \ \textbf{'R'} & HXB = & -55^{\circ}\text{C} \ \text{to} + 55^{\circ}\text{C} \\ & \textbf{GOST} \ \textbf{'R'} & HXB = & -55^{\circ}\text{C} \ \text{to} + 55^{\circ}\text{C} \\ & \textbf{Weight:} & HXBS \& \text{LEDS} - 3.8\text{kg} \ \text{each} \ (\text{approx}). \\ & HXBA \& \text{LEDA} - 2\text{kg}. \ \text{each} \ (\text{approx}). \\ & \text{Ingress Protection:} \ \text{IP66 \& IP67.} \\ \hline \textbf{Entries:} & \text{Up to} \ 4 \ \text{x} \ \text{M25} \ \text{ISO or} \ 1/2^{\text{u}} \ / \ ^{3}/4^{\text{u}} \ \text{NPT.} \\ \hline \textbf{Terminals:} & HXB \& \ \text{XBT} - 6 \ \text{off suitable for up to} \ 2.5\text{mm}^2 \ \text{cable}. \\ & \text{LED} - 6 \ \text{off suitable for up to} \ 2.5\text{mm}^2 \ \text{cable}. \\ \end{array}$	Material:	HXBA, XBTA & LEDA – LM25 TF Marine Grade Alloy. Lens – Glass. UL version available only in marine grade alloy.					
$\begin{array}{c} -55^{\circ}\text{C} \ \text{to} \ +55^{\circ}\text{C} \ \text{(T6)} \\ \text{LED} = & -55^{\circ}\text{C} \ \text{to} \ +55^{\circ}\text{C}^{*}\text{(T6)} \\ \text{XBT} = & -55^{\circ}\text{C} \ \text{to} \ +85^{\circ}\text{C} \ \text{(T4)} \\ \text{XBT} = & -50^{\circ}\text{C} \ \text{to} \ +40^{\circ}\text{C} \\ \text{UL} & \text{HXB} = & -55^{\circ}\text{C} \ \text{to} \ +40^{\circ}\text{C} \\ \text{UL} & \text{HXB} = & -55^{\circ}\text{C} \ \text{to} \ +35^{\circ}\text{C} \\ \text{GOST} \ \text{'R'} & \text{HXB} = & -55^{\circ}\text{C} \ \text{to} \ +55^{\circ}\text{C} \\ \text{'Coperating temp is} \ -20^{\circ}\text{C} \\ \hline \end{array}$	Finish:	Epoxy paint finish as standard or to customer specification.					
HXBA & LEDA – 2kg. each (approx.). Ingress Protection: IP66 & IP67. Entries: Up to 4 x M20 / M25 ISO or $^{1}/2"$ / $^{3}/4"$ NPT. Terminals: HXB & XBT – 6 off suitable for up to 2.5mm ² cable. LED – 6 off suitable for up to 2.5mm ² cable.	Certified Temp:	$\begin{array}{rcl} -55^{\circ}\text{C to } +55^{\circ}\text{C } & (\text{T6}) \\ \text{LED} = & -55^{\circ}\text{C to } +55^{\circ}\text{C} & (\text{T6}) \\ \text{XBT} = & -55^{\circ}\text{C to } +85^{\circ}\text{C} & (\text{T4}) \\ \text{CSA} & \text{HXB} = & -50^{\circ}\text{C to } +40^{\circ}\text{C} \\ \text{UL} & \text{HXB} = & -55^{\circ}\text{C to } +70^{\circ}\text{C} \\ \text{XBT} = & -40^{\circ}\text{C to } +85^{\circ}\text{C} \\ \text{GOST 'R'} & \text{HXB} = & -55^{\circ}\text{C to } +55^{\circ}\text{C} \end{array}$					
Entries:Up to $4 \times M20 / M25 \text{ ISO or } ^{1}/2" / ^{3}/4" \text{ NPT.}$ Terminals:HXB & XBT - 6 off suitable for up to 2.5mm^2 cable.LED - 6 off suitable for up to 2.5mm^2 cable.		HXBS & LEDS – 3.8kg each (approx).					
Terminals:HXB & XBT - 6 off suitable for up to 2.5mm^2 cable. LED - 6 off suitable for up to 2.5mm^2 cable.	Ingress Protection						
LED – 6 off suitable for up to 2.5 mm ² cable.	Entries:						
Relay Initiate: Initiation by telephone ringing tone or low voltage control signals		HXB & XBT – 6 off suitable for up to 2.5mm ² cable. LED – 6 off suitable for up to 2.5mm ² cable.					
initiation by torophone mighty tone of tow voltage control signals.	Relay Initiate:	Initiation by telephone ringing tone or low voltage control signals.					
Labels: Duty & Tag Labels optional.	Labels:	Duty & Tag Labels optional.					



ALL DIMENSIONS IN MILLIMETRES

Electrical Ratings:

	d.	C.	a.c. 50/60Hz				
Voltage	24	48	110	120	220	240	254
Tube Energy (Joules) SM87 HXB XBT	5	5	6	7	6	7	8
Peak Current Consumption (mA)	393	175	250	275	120	135	153
Current Consumption SM87 LED	165mA	85mA	N/A	N/A	N/A	N/A	N/A
Power Consumption (Watts)	7.2	7.6	25	27	25	27	35
Effective Intensity (Cd)	29	29	32	39	32	39	44
Peak Intensity (Cd) 22213 22213 25061 30187 25061 30187 3417						34174	
NOTE: The above figures (Cd) are for a clear lens @ 1Hz flash rate.							

Multiplying Factor for Coloured Lenses

multiplying racion for coloured Lenses.							
Red	Blue	Amber Green		Yellow			
0.15	0.12	0.51	0.49	0.86			

The photometric data given above has been verified by BSI. Reports are available if required.

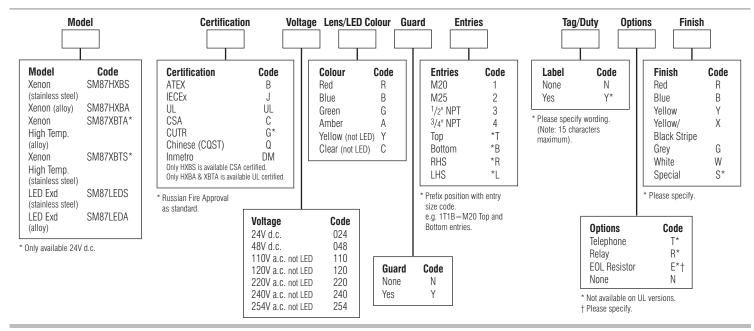
LED Light Output. Steady or Flashing (customer selectable)

	Red	Blue	Amber	Green
Total LED Output (Candela)	192	64	64	17

LED/Lens Colour: Red, Blue, Green, Amber, Yellow (not LED) or Clear (not LED). Flash Rate: 60fpm as standard, other flash rates available on request.

Ordering Requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.



All specifications, dimensions, weights and tolerances are nominal (typical) and MEDC reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.

