

TrEx



... for explosion hazard environment group II, category 2 (zone 1, 21 and 2, 22).

USE

The metal light fitting with satinated tempered safety glass is suitable for environment with hazard of explosion of gases, vapours and dust for zones 1, 21 and 2,22. It meets the requirements of the European Community Directive No. 2014/34/EU. It is resistant against chemically aggressive environment, therefore it fits for industrial premises like chemical factories, plants for processing of gases and oil, power plants, army facilities, automotive factories, laboratories and other facilities of heavy and mechanical engineering. The light fitting in IP66 protection is resistant against dust and splashing water.

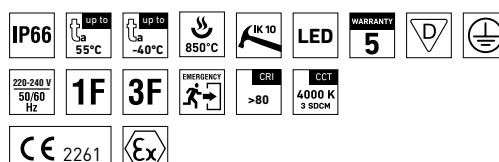
USE IN ENVIRONMENT WITH HAZARD OF EXPLOSION

TÜV CY 21 ATEX 0206562X	Light fitting with disconnecter	II 2G Ex db eb mb op is IIC T4 Gb
	Light fitting Mxh with disconnecter	II 2D Ex tb IIIC T68°C Db
AR19ATEX131U	Light fitting without disconnecter	II 2G Ex eb mb op is IIC T4 Gb
	Light fitting Mxh without disconnecter	II 2D Ex tb IIIC T68°C Db
AR19ATEX131U	Ex battery box HM 4Ah	II 2G Ex d IIC T4 Gb
TÜV CY 20 ATEX 0206368 U	Ex disconnecter OT 2A-2C Ex d	II 2G Ex db IIC Gb

The basic requirements for safety and health protection are secured by verification of conformity with EN 60079-0, EN 60079-7, EN 60079-18, EN 60079-1, EN 60079-28 and EN 60079-31.

ADVANTAGES

- Light fitting protection **IP66**
- High temperature resistance on a range from **t_a = -40 °C to t_a = 55 °C**
- For hazardous areas of zones 1, 21 and 2, 22
- Lifetime: 75 000 hours / L80B50 at t_a = 55 °C, 110 000 hours / L70B50 at t_a = 55 °C
- Cable glands: plastic ATEX M20 × 1,5, or metallic (INOX version on request)
- Wide fixing options including recessed frame for false ceiling
- Up to 45 % lower power consumption as compared to fluorescent tubes
- Constant luminous flux even at ambient temperature of -40 °C
- Standard model CRI > 80: 4000 K, at request CRI > 80: 3000 K, 5000 K, 5700 K
- Optional through-wiring of up to 7 wires at reflector



TrEx



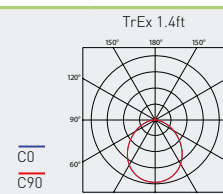
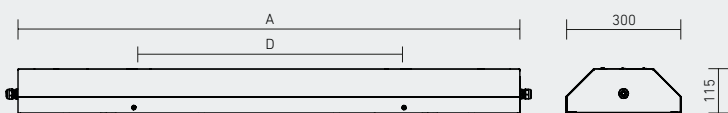
TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: $t_a = -40^\circ\text{C}$
- Maximum ambient temperature: $t_a = 55^\circ\text{C}$
- Ambient temperature: $t_a = 0 - 40^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 147 lm/W
- CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 75 000 hours / L80B50 at $t_a = 55^\circ\text{C}$, 110 000 hours / L70B50 at $t_a = 55^\circ\text{C}$
- Body: powder coated steel sheet RAL 9003, or INOX (AISI 304)
- Diffuser: satedated tempered safety glass
- Sealing: glued EPDM
- Cable glands: plastic ATEX M20 x 1,5, or metallic (INOX version on request)
- Terminal block: ATEX, screwless WAGO, Cable cross-section max: 4 mm²

- Installation: the package includes suspensory eyes 2 x M6
- Electric equipment: LED modules, current driver, disconnecter and Ex battery box with ATEX certificate
- The watt and lumen values can vary by $\pm 7,5\%$

AT REQUEST

- CRI > 80: 3000 K, 5000 K, 5700 K
- Halogen-free wires
- Design modification for fixing and connecting in the false ceiling
- Diffuser: transparent tempered safety glass
- Cable glands: metal or armoured ATEX cable glands M20 x 1,5 or M25 x 1,5
- Increased number of cable entries on sides and in upper part of light fitting if recessed frame for false ceiling mounted



Type	Min. and max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	System input [W]	System efficiency [lm/W]	Net weight [kg]	A [mm]	D [mm]
Light fitting without a battery system								
TrEx 1.2ft 3200/840	-40 / 55	3200	2350	19	123	8,3	730	350
TrEx 1.2ft 4400/840	-40 / 55	4400	3360	27	124	8,3	730	350
TrEx 1.4ft 6400/840	-40 / 55	6400	4700	35	134	14,6	1300	700
TrEx 1.4ft 8800/840	-40 / 55	8800	6720	50	134	14,6	1300	700
TrEx 1.5ft 8000/840	-40 / 55	8000	5880	40	147	17,3	1580	700
TrEx 1.5ft 11000/840	-40 / 55	11000	8400	59	142	17,3	1580	700
TrEx 2.2ft 6400/840	-40 / 55	6400	4700	35	134	8,9	730	350
TrEx 2.2ft 8800/840	-40 / 50	8800	6720	50	134	8,9	730	350
TrEx 2.4ft 12800/840	-40 / 55	12800	9400	67	140	16,0	1300	700
TrEx 2.4ft 17600/840	-40 / 50	17600	13440	100	134	16,0	1300	700
TrEx 2.5ft 16000/840	-40 / 55	16000	11760	80	147	18,9	1580	700
TrEx 2.5ft 22000/840	-40 / 50	22000	16800	121	138	18,9	1580	700

Type	Min. and max. ambient temperature [°C]	Emergency light flux of light fitting 1h [lm]	Emergency light flux of light fitting 3h [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM emergency lighting kit						
TrEx 1.2ft 4400/840 Mxh	0 / 40	990	630	2	NiCd HT	+1,3
TrEx 1.4ft 8800/840 Mxh	0 / 40	790	580	2	NiCd HT	+1,3
TrEx 1.5ft 11000/840 Mxh	0 / 40	790	560	2	NiCd HT	+1,3

TrEx DIS

Code	Type
10339	TrEx 1.2ft 3200/840 DIS
10341	TrEx 1.2ft 4400/840 DIS
10342	TrEx 1.4ft 6400/840 DIS
10343	TrEx 1.4ft 8800/840 DIS
10346	TrEx 1.5ft 8000/840 DIS
10347	TrEx 1.5ft 11000/840 DIS
10348	TrEx 2.2ft 6400/840 DIS
10349	TrEx 2.2ft 8800/840 DIS
10351	TrEx 2.4ft 12800/840 DIS
10352	TrEx 2.4ft 17600/840 DIS
10353	TrEx 2.5ft 16000/840 DIS
10356	TrEx 2.5ft 22000/840 DIS

Light fitting with disconnecter

	1F	3F	M1h	M3h	3F M1h	3F M3h
10357		10379	x	x	x	x
10358		10382	10409	10429	10445	10451
10359		10388	x	x	x	x
10361		10389	10418	10438	10447	10453
10362		10392	x	x	x	x
10363		10398	10422	10442	10449	10455
10366		10399	x	x	x	x
10367		10402	x	x	x	x
10368		10404	x	x	x	x
10369		10405	x	x	x	x
10372		10406	x	x	x	x
10378		10407	x	x	x	x

TrEx

Code	Type
10219	TrEx 1.2ft 3200/840
10222	TrEx 1.2ft 4400/840
10224	TrEx 1.4ft 6400/840
10225	TrEx 1.4ft 8800/840
10226	TrEx 1.5ft 8000/840
10227	TrEx 1.5ft 11000/840
10228	TrEx 2.2ft 6400/840
10229	TrEx 2.2ft 8800/840
10231	TrEx 2.4ft 12800/840
10232	TrEx 2.4ft 17600/840
10233	TrEx 2.5ft 16000/840
10236	TrEx 2.5ft 22000/840

Light fitting without disconnecter

	1F	3F	M1h	M3h	3F M1h	3F M3h
10237		10253	x	x	x	x
10238		10256	10289	10298	10318	10334
10239		10257	x	x	x	x
10241		10258	10294	10302	10322	10336
10242		10259	x	x	x	x
10243		10262	10296	10309	10329	10338
10246		10268	x	x	x	x
10247		10269	x	x	x	x
10248		10272	x	x	x	x
10249		10278	x	x	x	x
10251		10279	x	x	x	x
10252		10282	x	x	x	x

TrEx DIS INOX

Code	Type
10519	TrEx 1.2ft 3200/840 DIS INOX
10521	TrEx 1.2ft 4400/840 DIS INOX
10522	TrEx 1.4ft 6400/840 DIS INOX
10523	TrEx 1.4ft 8800/840 DIS INOX
10526	TrEx 1.5ft 8000/840 DIS INOX
10527	TrEx 1.5ft 11000/840 DIS INOX
10528	TrEx 2.2ft 6400/840 DIS INOX
10529	TrEx 2.2ft 8800/840 DIS INOX
10531	TrEx 2.4ft 12800/840 DIS INOX
10532	TrEx 2.4ft 17600/840 DIS INOX
10533	TrEx 2.5ft 16000/840 DIS INOX
10536	TrEx 2.5ft 22000/840 DIS INOX

Light fitting with disconnecter, body steel sheet grade AISI 304

	1F	3F	M1h	M3h	3F M1h	3F M3h
10537		10572	x	x	x	x
10538		10574	10602	10616	10623	10632
10539		10575	x	x	x	x
10542		10576	10609	10618	10627	10636
10548		10577	x	x	x	x
10549		10578	10614	10621	10629	10638
10552		10579	x	x	x	x
10558		10582	x	x	x	x
10559		10588	x	x	x	x
10562		10589	x	x	x	x
10568		10592	x	x	x	x
10569		10598	x	x	x	x

TrEx INOX

Code	Type
10456	TrEx 1.2ft 3200/840 INOX
10457	TrEx 1.2ft 4400/840 INOX
10458	TrEx 1.4ft 6400/840 INOX
10459	TrEx 1.4ft 8800/840 INOX
10460	TrEx 1.5ft 8000/840 INOX
10461	TrEx 1.5ft 11000/840 INOX
10462	TrEx 2.2ft 6400/840 INOX
10463	TrEx 2.2ft 8800/840 INOX
10464	TrEx 2.4ft 12800/840 INOX
10465	TrEx 2.4ft 17600/840 INOX
10466	TrEx 2.5ft 16000/840 INOX
10467	TrEx 2.5ft 22000/840 INOX

Light fitting without disconnecter, body steel sheet grade AISI 304

	1F	3F	M1h	M3h	3F M1h	3F M3h
10468		10480	x	x	x	x
10469		10481	10493	10499	10505	10512
10470		10482	x	x	x	x
10471		10483	10495	10501	10507	10516
10472		10484	x	x	x	x
10473		10485	10497	10503	10509	10518
10474		10486	x	x	x	x
10475		10487	x	x	x	x
10476		10488	x	x	x	x
10477		10489	x	x	x	x
10478		10490	x	x	x	x
10479		10491	x	x	x	x

LEGEND

1F 1-phase 3 core through-wiring in the luminaire**3F** 3-phase 5 core through-wiring in the luminaire**M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination**M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination**3F Mxh** 3-phase 5 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)**DIS** - light fitting with disconnecter

CERTIFICATION

TÜV CY 21 ATEX 0206562X - TrEx, TrEx Mxh		
Directive		Standards
2014/34/EU	ATEX	EN 60079-0:2012 + A11:2013
		EN IEC 60079-0:2018
		EN 60079-1:2014
		EN 60079-7:2015
		EN 60079-18:2015
		EN 60079-28:2015
		EN 60079-31:2014
2014/35/EU	General requirements and standards	EN 60598-1:2015
		EN 60598-2-1:89
		EN 62471:2008
		EN 55015:2013
		EN 60598-2-22:2014
		EN 61547:2009
		EN 61000-3-2:14
		EN 61000-3-3:13
2011/65/EN	RoHS	EN 50581:2012

AR19ATEX131U - Ex battery box HM4Ah

Directive		Standards
2014/34/EU	ATEX	EN IEC 60079-0:2018 EN 60079-1:2014

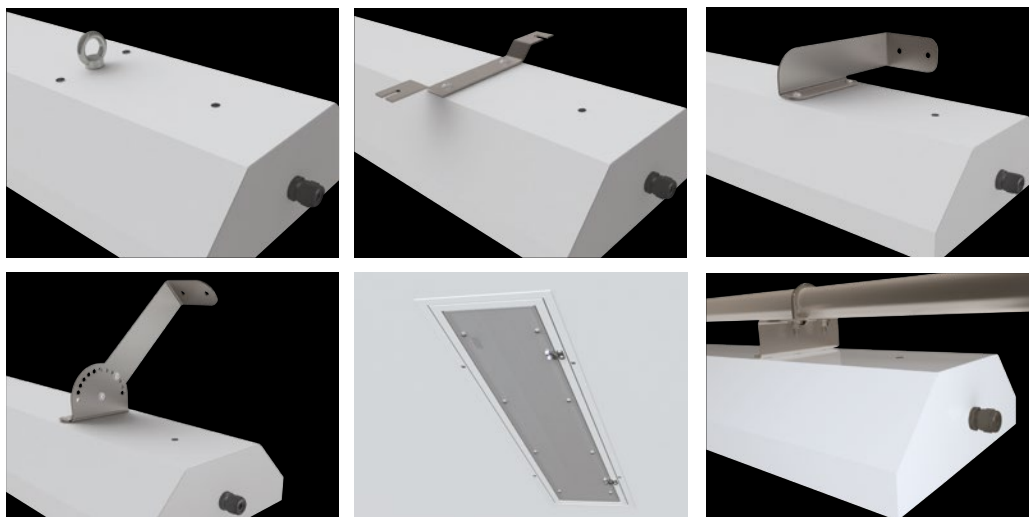
TÜV CY 20 ATEX 0206368 U - Ex disconnecter OT 2A-2C Ex d

Directive		Standards
2014/34/EU	ATEX	EN IEC 60079-0:2018 EN 60079-1:2014

	Identification of external influences	Classification of spaces	
		Identification	Establishment regulation
Hazard of explosion of flammable dust	BE3N1	ZONE 21, 22	EN 60079-17
			EN 60079-14
			EN 60079-10-2
Hazard of explosion of flammable gases and vapours	BE3N2	ZONE 1, 2	EN 60079-10-1
			EN 60079-14
			EN 60079-17

LIGHT FITTING ATTACHMENT

- a) Suspension eyes 2×M6 - in standard model
- b) Holders directly on the ceiling
- c) Side suspensions on the wall
- d) Adjustable side suspensions on the wall
- e) Recessed frame for false ceiling
- f) Holders on tube structures



LIGHT FITTING DETAILED VIEW

TrEx

