

INCREMENTAL
ENCODER

OL80EXS

EXPLOSION-PROOF ENCODER, CERTIFIED BY ISSeP, ATEX Ex d II C T6/T5,
ACCORDING TO CENELEC RULES. INTERNAL COUPLING. FIT TO BE USED ON
WORKING ENVIRONMENTS WITH EXPLOSIVE ATMOSPHERE (EXCEPT FOR GRISU').

ATEX
**(DIRECTIVE
2014/34/EU)**

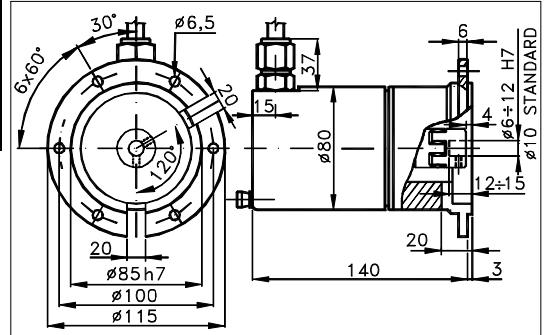
CE Ex II 2 G D

Sized draw standard version: CV1 R Measures without tolerance according to UNI ISO 2768-mk
Max joint compensation: axial ± 0,25mm, radial ± 0,05mm, angular ± 1°



CE Ex II 2 G Ex d IIC T6 Gb
D Ex tb IIIC T85°C Db IP6X
CE Ex II 2 G Ex d IIC T5 Gb
D Ex tb IIIC T100°C Db IP6X

**GAS "G"
and
DUST "D"**



Ex Encoder built with certification ATEX explosion-proof rules, according to armonized standards EN60079-0/EN60079-1/EN60079-31. Certified by ISSeP ISSeP07ATEX018X and notified by CESI CESI02ATEX138Q. Special conditions for safe use: symbol X.
The apparatus is fitted with a cable suitable with temperature of 100°C minimum permanently connected to it; an appropriate connection of the free end of the cable shall be foreseen. The quality of the assembly screws shall be 8.8 at least.

Ex : Manufactured in accordance with one or more Cenelec security Standards.
d/tb : It means explosion-proof case.
Gb/Db : Protection level.
IIIC : Conductive dust.
II : Built for use in all sites except for mines with grisul'.

C : Maximum security (MESG) experimental gap type.
IP6X : Degree of protection (IP code).
T5 : Maximum temperature of the case surface: 100°C.
T6 : Maximum temperature of the case surface: 85°C (standard).

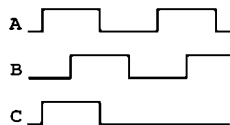
TECHNICAL FEATURES AND POSSIBLE CONFIGURATIONS

- **Base**.....: ALUMINIUM (*)
 - **Cover**.....: ANODIZED ALUMINIUM (*)
 - **Weight**.....: 1680 g
 - **Shaft**.....: Ø 6+12 HOLLOW STAINLESS.ST (*)
 - **Max.rad/axial load**.: 10 kg
 - **IP output side**..(°): see 'CONNECTIONS' of page 2
 - **IP shaft side**..(°): std. 65 sealed 66 low torq. -
opt. type (page 2): standard Z 6
 - **Contin. max RPM**(**): 6000 3000 -
 - **Starting torque gcm**: 18 50 -
 - **Ball bearings life**...: 1,5 x 10⁹ revolutions
 - **Impact resistance**....: 50 G x 11ms
 - **Vibration resistance**..: 12 G (10 ÷ 2000 Hz)
 - **Power supply**.....: 5÷30V (see page 2)
 - **Ambient temperature**..: (T5)-20÷60°C, (T6)-20÷40°C
 - **Storage temperature**..: -30 ÷ 85 °C
 - **N° of pulses/rev**.....: 1 ÷ 10000
 - **Max frequency**.....: 100 kHz (300 option)
 - **Max consumption mA**...: std 120 line driver 180 (*)
 - **Light source**.....: LED with ≥ 100000 h life
- (°) IP according to CEI EN 60529, EN 60529, IEC 529
(*) custom options
(**) intermittent max RPM + 30% of continuous max RPM

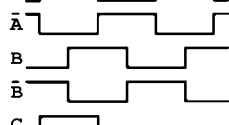
ELECTRONICS

CODE	DESCRIPTION	mA	CODE	DESCRIPTION	mA	CODE	DESCRIPTION	mA	CODE	DESCRIPTION	mA
	STANDARD NPN	10	N	DRIVER 26LS31	30	D	DISCRIMINAT.	70	Y	SINUSOID. 1Vpp	10
K	NPN OPEN COLL	10	T	TTL 7404	10						
Q	NPN	70	C	DRIVER 88C30	20						
R	NPN OPEN COLL	70	L	2x PUSH-P.PRO	70						
P	PNP	70	M	2x PUSH-PULL	70						
U	PNP OPEN COLL	70									
B	PUSH-PULL PRO	70									
H	PUSH-PULL	70									

(§)



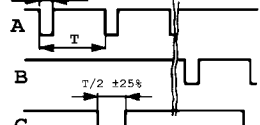
(§)



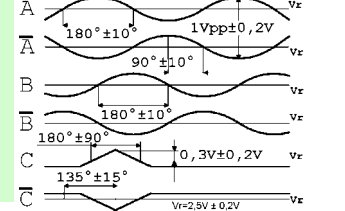
Tolerance between phases ± 25°, symmetry ± 15°

(§) Clock-wise output rotation (see shaf't).

(§)



(§)

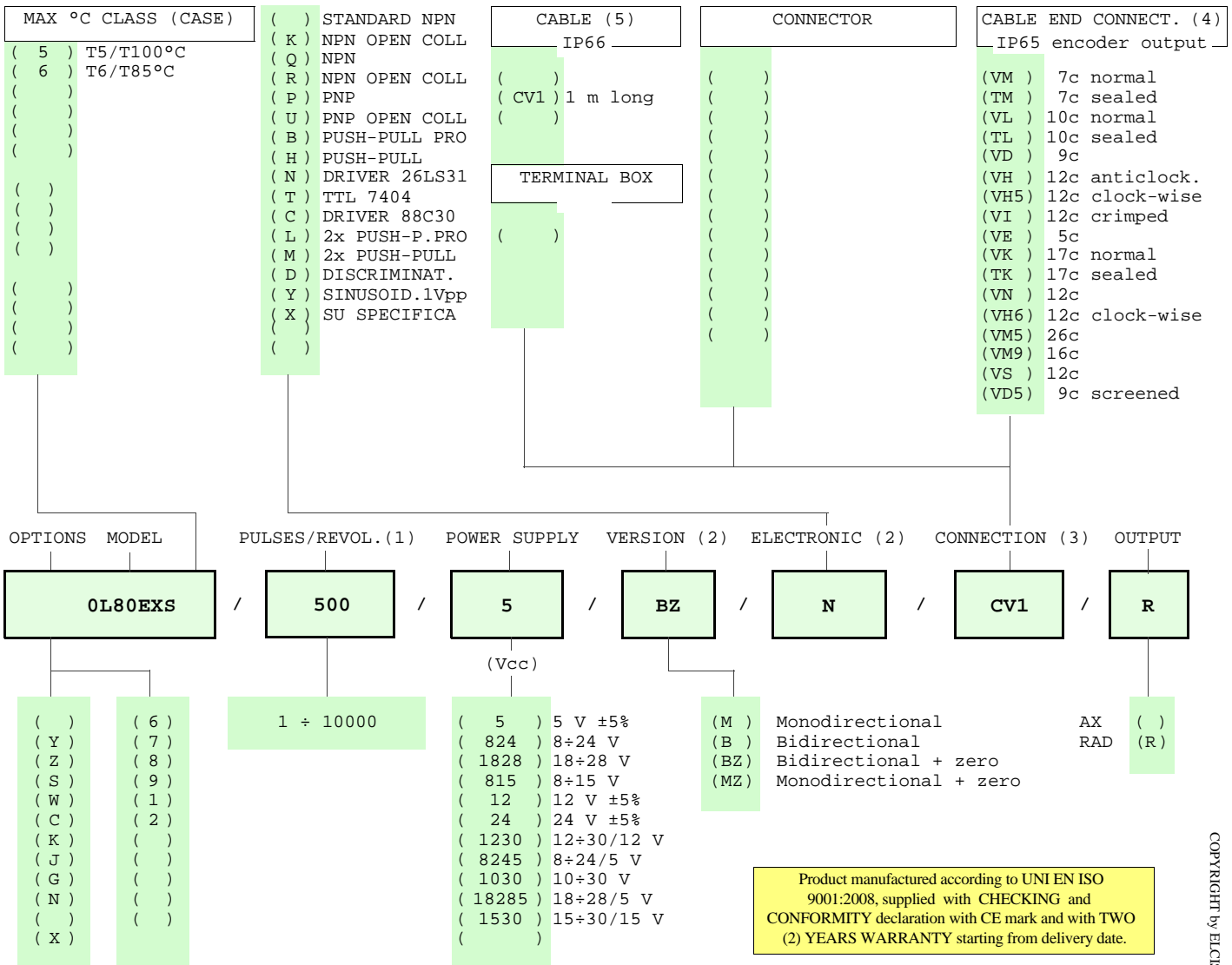


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POSSIBLE OPTIONS		POSSIBLE CONNECTIONS	
CODE	DESCRIPTION	CODE	DESCRIPTION
Y	Unbreak. disk (only T6)	6	∅ 6 Hollow shaft
Z	Sealed ball bearing	7	∅ 7 Hollow shaft
S	160 KHz frequency	8	∅ 8 Hollow shaft
W	300 KHz frequency	9	∅ 9.52 Hollow shaft
C	Low consumption	1	∅ 11 Hollow shaft
K	Invert. phase A,B,Zero.	2	∅ 12 Hollow shaft
J	Zero logic combination		
G	Tropicalization		
N	Stainless steel cover		
X	Custom options		
		CABLE (5)	
		CV1	OUTPUT AX RAD
		CONNECTOR	
		CABLE END CONNECTOR (4)	
		VM TM VL TL VD VH VH5 VI	OUTPUT AX RAD
		VE VK TK VN VH6 VM5 VM9 VS VD5	
		TERMINAL BOX	
			OUTPUT

ORDERING CODE



NOTE: FOR 88C30 MAX 15 Vdc

- (1) For further information see PULSES/REVOL. data sheet
- (2) For further information see ELECTRONIC data sheet
- (3) For further information see CONNECTION data sheet
- (4) Only outside the area with explosive atmosphere

- (5) The junction has to be made with Ex junction box or outside potentially explosive environments.

ELCIS encoder company has the right to make any changing without previous notice.

data sheet . II 153 EC0 page: 11.0L80EXS 2/2

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