

INCREMENTAL
ENCODER

80EXS

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

ATEX
(DIRECTIVE
2014/34/EU)

CE Ex II 2 G D

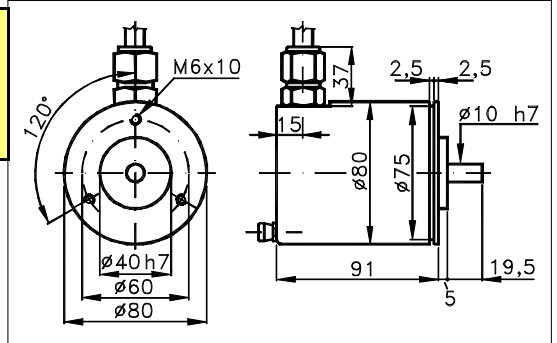
Sized draw standard version: CV1 R Measures without tolerance according to UNI ISO 2768-mk



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).

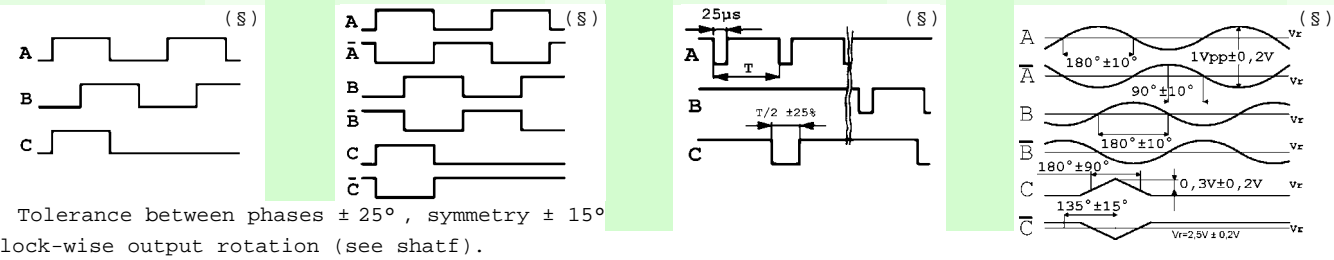
TECHNICAL FEATURES AND POSSIBLE CONFIGURATIONS

- Base.....: ANODIZED ALUMINIUM (*)
- Cover.....: ANODIZED ALUMINIUM (*)
- Weight.....: 1300 g
- Shaft.....: Ø 10 STAINLESS STEEL (*)
- 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
- 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°
(S) Clock-wise output rotation (see shaft).

POSSIBLE OPTIONS

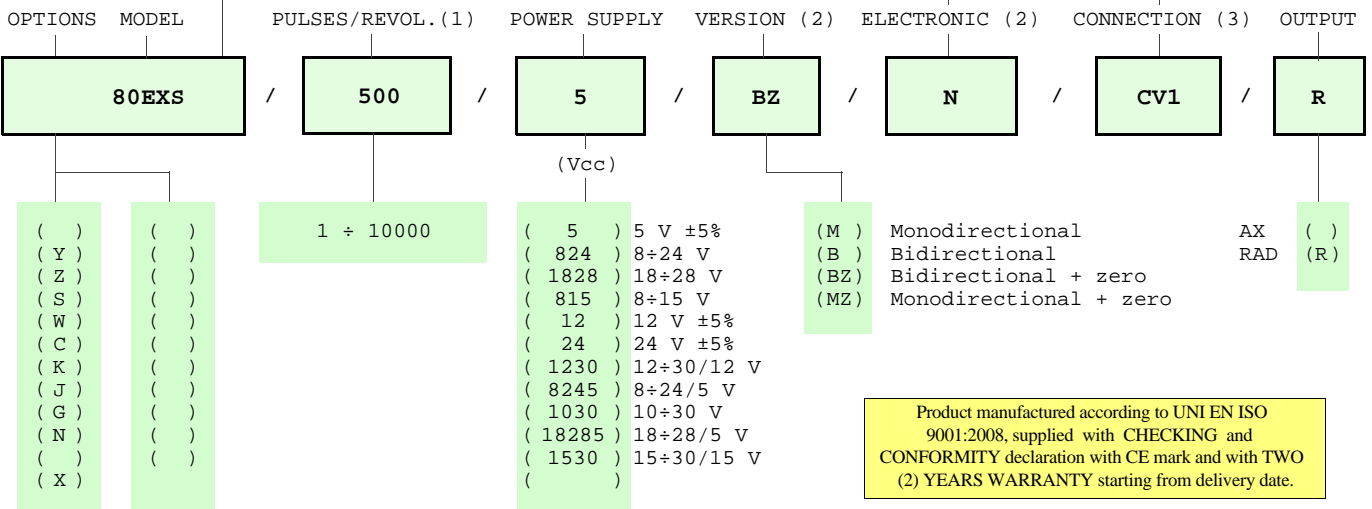
CODE	DESCRIPTION	CODE	DESCRIPTION
Y	Unbreak. disk (only T6)		
Z	Sealed ball bearing		
S	160 KHz frequency		
W	300 KHz frequency		
C	Low consumption		
K	Invert. phase A,B,Zero.		
J	Zero logic combination		
G	Tropicalization		
N	Stainless steel cover		
X	Custom options		

POSSIBLE CONNECTIONS

CABLE (5)								OUTPUT
CV1								AX RAD
CONNECTOR								OUTPUT
CABLE END CONNECTOR (4)								OUTPUT
VM	TM	VL	TL	VD	VH	VH5	VI	AX
VE	VK	TK	VN	VH6	VM5	VM9	VS	RAD
VD5								
TERMINAL BOX								OUTPUT

ORDERING CODE

MAX °C CLASS (CASE)	STANDARD NPN	CABLE (5)	CONNECTOR	CABLE END CONNECT. (4)
(5) T5/T100°C	(K) NPN OPEN COLL	IP66		IP65 encoder output
(6) T6/T85°C	(Q) NPN	()	()	(VM) 7c normal
()	(R) NPN OPEN COLL	()	()	(TM) 7c sealed
()	(P) PNP	(CV1) 1 m long	()	(VL) 10c normal
()	(U) PNP OPEN COLL	()	()	(TL) 10c sealed
()	(B) PUSH-PULL PRO		()	(VD) 9c
()	(H) PUSH-PULL	TERMINAL BOX	()	(VH) 12c anticlock.
()	(N) DRIVER 26LS31	()	()	(VH5) 12c clock-wise
()	(T) TTL 7404	()	()	(VI) 12c crimped
()	(C) DRIVER 88C30	()	()	(VE) 5c
()	(L) 2x PUSH-P.PRO	()	()	(VK) 17c normal
()	(M) 2x PUSH-PULL	()	()	(TK) 17c sealed
()	(D) DISCRIMINAT.	()	()	(VN) 12c
()	(Y) SINUSOID.1Vpp	()	()	(VH6) 12c clock-wise
()	(X) SU SPECIFICA	()	()	(VM5) 26c
()	()	()	()	(VM9) 16c
()	()	()	()	(VS) 12c
()	()	()	()	(VD5) 9c screened



NOTE: FOR 88C30 MAX 15Vdc

- (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 100EC0 page: 11. 80EXS 2/2



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