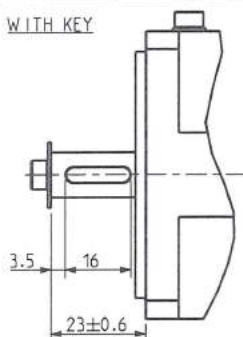
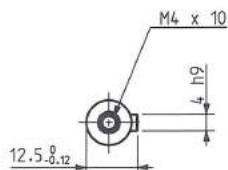


WITH KEY



SHAFT END



WEIGHT

Without brake	With brake
2.8 kg	3.2 kg

BRAKE

Supply voltage : 24V ±10%  
Static torque

	EX310
20°C	2 Nm
100°C	1.8 Nm

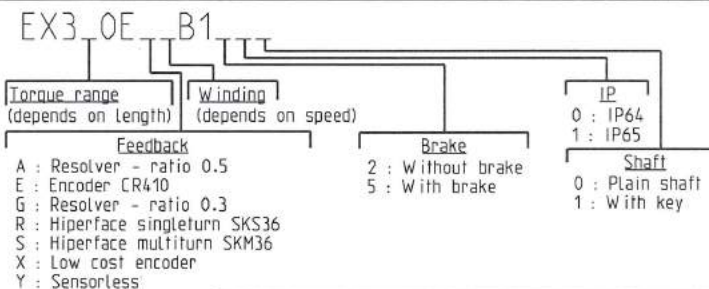


Certification :  
INERIS 03ATEX0060X  
INE 15.0060X

IP Motor	IP64	IP65
Protection	II 2 G Ex db IIB T4 Gb IP64	II 2 GD Ex db IIB T4 Gb IP65 Ex tb IIIC T135°C Db IP65
Standards	<ul style="list-style-type: none"> <li>IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements.</li> <li>IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d".</li> </ul>	<ul style="list-style-type: none"> <li>IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements.</li> <li>IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d".</li> <li>IEC/EN 60079-31 : Explosive atmospheres. Part 31 : Equipment dust ignition protection by enclosure "1".</li> </ul>

DIMENSIONS

Feedback option (feedback letter)	Resolver ratio 0.5 (A)	Encoder CR410 (E)	Resolver ratio 0.3 (G)	Hiperface SKS36 (R)	Hiperface SKM36 (S)	Low cost encoder (X)	Sensorless (Y)
EX310	without brake L (mm)			225			
	with brake L (mm)			255			



CONNECTIONS VARIANT ON SHEET 2/2

Masse :

General tolerances

DIN ISO 2768 mK

Dessine	11/09/09	OD	Vise	07/08/11 SD
Modifications				
C	AM 24108 22/04/13 SD			
B	AM 23600 27/04/11 YG	E	AM 24677 27/04/17 TD	
A	AM 23304 10/12/09 SD	D	AM 24578 22/07/16 SD	

Echelle  
4:5

Parker  
4 Bd Eiffel, CS 40090  
21604 LONGVIC CEDEX

EX300

OUTLINE DRAWING

Format A3  
F E S G I

344487

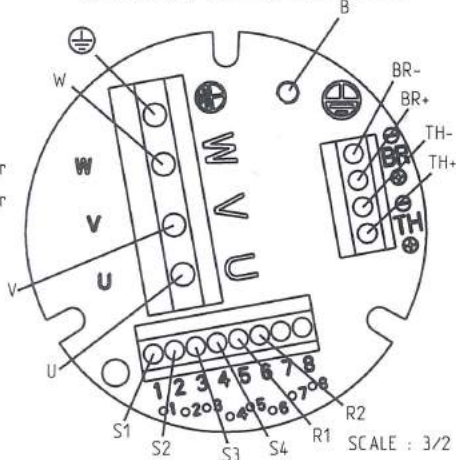
E

Sheet : 1/2

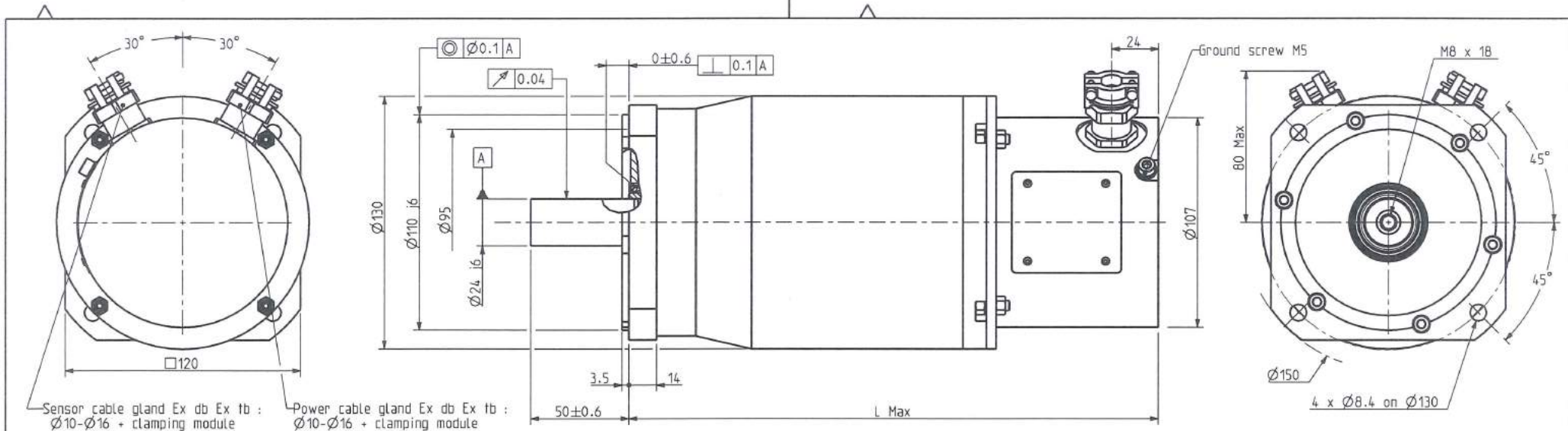
# Resolver and CR410 connection

Feedback letter : A/E/G

- U : Phase U  
V : Phase V  
W : Phase W  
TH- : Thermic protector  
TH+ : Thermic protector  
BR- : Brake- (option)  
BR+ : Brake+ (option)  
S1 : Resolver 1  
S2 : Resolver 2  
S3 : Resolver 3  
S4 : Resolver 4  
R1 : Resolver 5  
R2 : Resolver 6  
B : Shield option (screw M3)  
Ground







<div>WITH KEY</div> <div><p>SHAFT END</p><p>M8 x 18</p><p>8 h9</p><p>27.8</p><p>27.22</p><p>5</p><p>40</p><p>50±0.6</p></div>		<div>WEIGHT</div> <table><tr><th>Motor</th><th>Without brake</th><th>With brake</th></tr><tr><td>EX620</td><td>10 Kg</td><td>11 Kg</td></tr><tr><td>EX630</td><td>12.5 Kg</td><td>13.5 Kg</td></tr></table>		Motor	Without brake	With brake	EX620	10 Kg	11 Kg	EX630	12.5 Kg	13.5 Kg	<div>BRAKE</div> <div>Supply voltage : 24V ±10%</div> <div>Static torque</div> <table><tr><td></td><td>EX620</td><td>EX630</td></tr><tr><td>20 °C</td><td>12 N.m</td><td>12 N.m</td></tr><tr><td>100 °C</td><td>8 N.m</td><td>8 N.m</td></tr></table>			EX620	EX630	20 °C	12 N.m	12 N.m	100 °C	8 N.m	8 N.m	<div><div></div><div></div><div></div><div>Certification : INERIS 04ATEX0032X INE 15.0060X</div></div>		<table><tr><td>IP Motor</td><td>IP64</td><td>IP65</td></tr><tr><td>Protection</td><td>II 2 G Ex db IIB T4 Gb IP64</td><td>II 2 GD Ex db IIB T4 Gb IP65 Ex tb IIIC T135°C Db IP65</td></tr><tr><td>Standards</td><td><div>■ IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements.</div><div>■ IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d".</div></td><td><div>■ IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements.</div><div>■ IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d".</div><div>■ IEC/EN 60079-31 : Explosive atmospheres. Part 31 : Equipment dust ignition protection by enclosure "I".</div></td></tr></table>		IP Motor	IP64	IP65	Protection	II 2 G Ex db IIB T4 Gb IP64	II 2 GD Ex db IIB T4 Gb IP65 Ex tb IIIC T135°C Db IP65	Standards	<div>■ IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements.</div> <div>■ IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d".</div>	<div>■ IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements.</div> <div>■ IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d".</div> <div>■ IEC/EN 60079-31 : Explosive atmospheres. Part 31 : Equipment dust ignition protection by enclosure "I".</div>
Motor	Without brake	With brake																																		
EX620	10 Kg	11 Kg																																		
EX630	12.5 Kg	13.5 Kg																																		
	EX620	EX630																																		
20 °C	12 N.m	12 N.m																																		
100 °C	8 N.m	8 N.m																																		
IP Motor	IP64	IP65																																		
Protection	II 2 G Ex db IIB T4 Gb IP64	II 2 GD Ex db IIB T4 Gb IP65 Ex tb IIIC T135°C Db IP65																																		
Standards	<div>■ IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements.</div> <div>■ IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d".</div>	<div>■ IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements.</div> <div>■ IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d".</div> <div>■ IEC/EN 60079-31 : Explosive atmospheres. Part 31 : Equipment dust ignition protection by enclosure "I".</div>																																		

DIMENSIONS												
	Feedback options (feedback letter)		Resolver ratio 0.5 (A)	Resolver ratio 0.3 (G)	Low cost encoder (X)	Sensorless (Y)	Hiperface SKS36 (R)	Hiperface SKM36 (S)	Hiperface SRS50 (T)	Hiperface SRMS0 (U)	Endat ECN 1113 (V)	Endat EQN 1125 (W)
EX620	Without brake	L (mm)	275				305		325			
	With brake	L (mm)	300				330		350			
EX630	Without brake	L (mm)	300				330		350			
	With brake	L (mm)	325				355		375			

EX6E B1

Torque range  
(depends on length)

Winding  
(depends on speed)

Feedback

Brake

IP

Shaft

A : Resolver - ratio 0.5  
G : Resolver - ratio 0.3  
R : Hiperface singleturn SKS36  
S : Hiperface multiturn SKM36  
T : Hiperface singleturn SRS50  
U : Hiperface multiturn SRMS0  
V : Endat singleturn ECN 1113  
W : Endat multiturn EQN 1125  
X : Low cost encoder  
Y : Sensorless

2 : Without brake  
5 : With brake

0 : IP64  
1 : IP65

0 : Plain shaft  
1 : With key

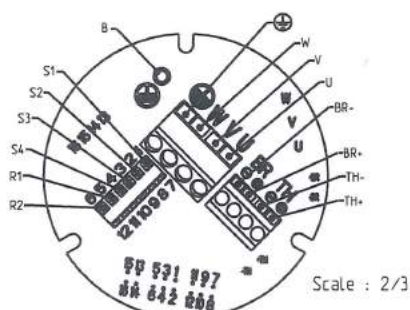
CONNECTIONS VARIANTS ON SHEET 2/2

														Sheet : 1/2											
Masse :	General tolerances	Dessine	07/10/09	SD	Vise	05/05/17	JD			Echelle		EX600	Format A3	F	E	S	G	I							
DIN ISO 2768 mK		Modifications	C	AM 24229 03/12/13 AH																					
		B	AM 24108 22/04/13 SD			E	AM 24677 27/04/17 TD																		
		A	AM 23304 10/12/09 SD			D	AM 24578 22/07/16 SD																		
												1:2			4 Bd Eiffel, CS 40090 21604 LONGVIC CEDEX		OUTLINE DRAWING				344550				E

## Resolver connection

Feedback letter : A/G

U : Phase U  
V : Phase V  
W : Phase W  
TH- : Thermic protector  
TH+ : Thermic protector  
BR- : Brake - (option)  
BR+ : Brake + (option)  
S1 : Resolver 1  
S2 : Resolver 2  
S3 : Resolver 3  
S4 : Resolver 4  
R1 : Resolver 5  
R2 : Resolver 6  
B : Shield option (screw M4)  
⊕ : Ground



S1 = Cos +	S2 = Sin +	R1 = Excitation +
S3 = Cos -	S4 = Sin -	R2 = Excitation -

Rotor is rotating in clockwise viewed from shaft end view.

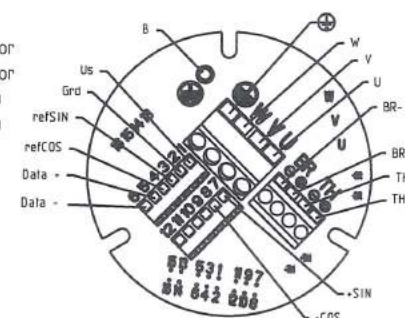


Certification :  
INERIS 04ATEX0032X  
INE 15.0060X

## Hiperface connection

Feedback letter : R/S/T/U

U : Phase U  
V : Phase V  
W : Phase W  
TH- : Thermic protector  
TH+ : Thermic protector  
BR- : Brake - (option)  
BR+ : Brake + (option)  
1 : Encoder Us  
2 : Encoder gnd  
3 : Encoder refSIN  
4 : Encoder refCOS  
5 : Encoder Data +  
6 : Encoder Data -  
7 : Encoder + SIN  
8 : Encoder + COS  
B : Shield option (screw M4)  
⊕ : Ground

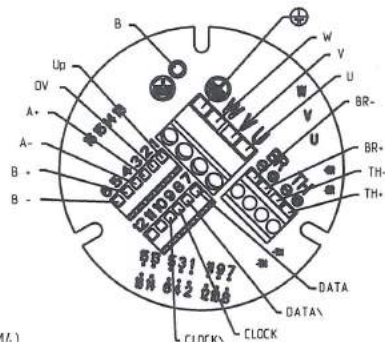


Scale : 2/3

## Endat connection

Feedback letter : V/W

U : Phase U  
V : Phase V  
W : Phase W  
TH- : Thermic protector  
TH+ : Thermic protector  
BR- : Brake - (option)  
BR+ : Brake + (option)  
1 : Encoder Up 5V ±5%  
2 : Encoder OV  
3 : Encoder A +  
4 : Encoder A -  
5 : Encoder B +  
6 : Encoder B -  
7 : Encoder DATA  
8 : Encoder DATA\   
9 : Encoder CLOCK  
10 : Encoder CLOCK\   
B : Shield option (screw M4)  
⊕ : Ground

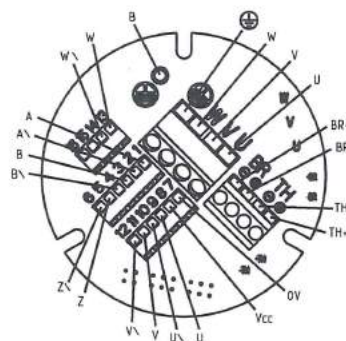


Scale : 2/3

## Low cost encoder connection

Feedback letter : X

U : Phase U  
V : Phase V  
W : Phase W  
TH- : Thermic protector  
TH+ : Thermic protector  
BR- : Brake - (option)  
BR+ : Brake + (option)  
1 : A  
2 : A\   
3 : B  
4 : B\   
5 : Z  
6 : Z\   
7 : 0  
8 : Vcc  
B : Shield option (screw M4)  
⊕ : Ground

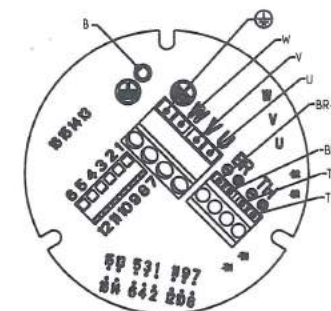


Scale : 2/3

## Sensorless connection

Feedback letter : Y

U : Phase U  
V : Phase V  
W : Phase W  
TH- : Thermic protector  
TH+ : Thermic protector  
BR- : Brake - (option)  
BR+ : Brake + (option)  
B : Shield option (screw M4)  
⊕ : Ground



Scale : 2/3

### ENCODER SETTINGS

#### Resolver setting

Feedback letter : A/G

Motor powered by direct current at the current nominal value (W+ and V-). The shift is 90° electrical.

#### Hiperface SKS/SKM setting

Feedback letter : R/S

Motor powered by direct current at the current nominal value (W+ and V-). Value in encoder memory is 205.

#### Hiperface SRS/SRM setting

Feedback letter : T/U

Motor powered by direct current at the current nominal value (W+ and V-). Value in encoder memory is 1638.

#### Endat setting

Feedback letter : V/W

Motor powered by direct current at the current nominal value (W+ and V-). Value in encoder memory is 410.

#### Low cost encoder setting

Feedback letter : X

Engine driven clockwise shaft end side. Switching signal V is in phase with FEM UV.

Masse :

General tolerances

DIN ISO 2768 mK

Dessine

07/10/09

SD

Vise

07/05/17 SD SD

Modifications

C AM 24229 03/12/13 AH

B AM 24108 22/04/13 SD

A AM 23304 10/12/09 SD

E

AM 24677 27/04/17 TD

D

AM 24578 22/07/16 SD

Echelle

1:2



4 Bd Eiffel, CS 40090  
21604 LONGVIC CEDEX

EX600

OUTLINE DRAWING

Format

A3

F E S G I

x x

344550

E

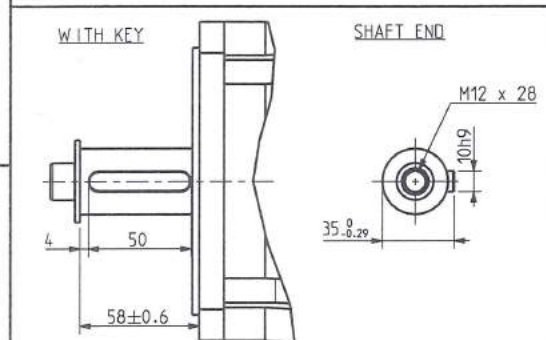
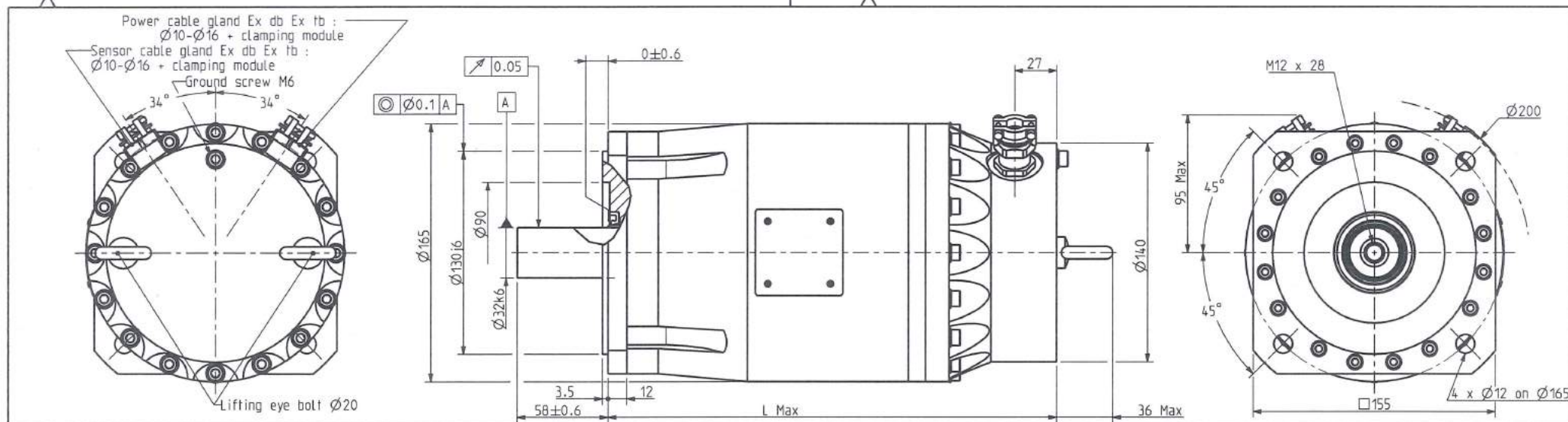
Sheet : 2/2





[illegible]





WEIGHT

Motor	Without brake	With brake
EX820	22 kg	25 kg
EX840	28 kg	31 kg
EX860	38 kg	41 kg

BRAKE

Supply voltage : 24V  $\pm 10\%$   
 Static torque

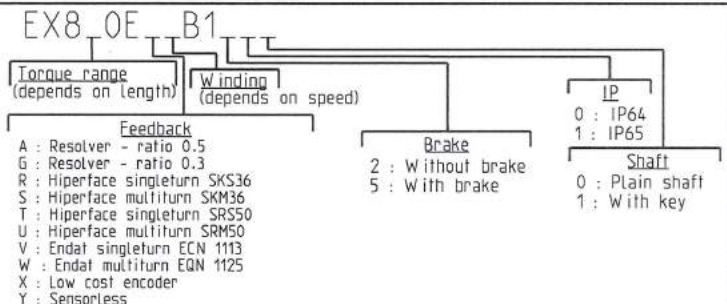
	EX820	EX840	EX860
20°C	36 Nm	36 Nm	36 Nm
100°C	32 Nm	32 Nm	32 Nm



IP Motor	IP64	IP65
Protection	II 2 G Ex db IIB T4 Gb IP64	II 2 GD Ex db IIB T4 Gb IP65 Ex tb IIIC T135°C Db IP65
Standards	<ul style="list-style-type: none"> <li>IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements..</li> <li>IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d".</li> </ul>	<ul style="list-style-type: none"> <li>IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements.</li> <li>IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d".</li> <li>IEC/EN 60079-31 : Explosive atmospheres. Part 31 : Equipment dust ignition protection by enclosure "I".</li> </ul>

# DIMENSIONS

	Feedback option (feedback letter)	Resolver ratio 0.5 (A)	Low cost encoder (X)	Sensorless (Y)	Hiperface SKS36 (R)	Hiperface SKM36 (S)	Hiperface SR550 (T)	Hiperface SRM50 (U)	Endat ECN 1113 (V)	Endat EQN 1125 (W)
EX820	without brake	L (mm)	290		310			325		
	with brake	L (mm)	325		345			360		
EX840	without brake	L (mm)	350		370			385		
	with brake	L (mm)	385		405			420		
EX860	without brake	L (mm)	410		430			445		
	with brake	L (mm)	445		465			480		



CONNECTIONS VARIANT ON SHEET 2/2

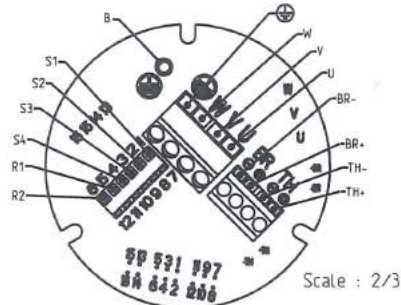
General tolerances		Dessine	14/09/09	OD	Vise	07/05/192		Echelle	2:5	Format	A3	F	E	S	G	I	
DIN ISO 2768 mK		Modifications	C	AM 24607 26/06/16 SD								x					
			B	AM 24108 22/04/13 SD													
			A	AM 23304 10/12/09 SD													
			D	AM 24677 27/04/17 TD													



EX800	OUTLINE DRAWING	344664	D
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U : Phase U  
V : Phase V  
W : Phase W  
TH- : Thermic protector  
TH+ : Thermic protector  
BR- : Brake- (option)  
BR+ : Brake+ (option)  
S1 : Resolver 1  
S2 : Resolver 2  
S3 : Resolver 3  
S4 : Resolver 4  
R1 : Resolver 5  
R2 : Resolver 6

### Resolver connection Feedback letter : A



S1 = Cos +	S2 = Sin +	R1 = Excitation +
S3 = Cos -	S4 = Sin -	R2 = Excitation -

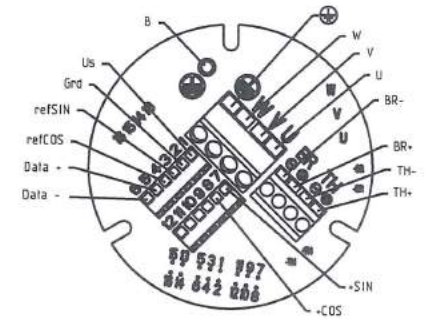
Rotor is rotating in clockwise viewed from shaft end view.



Certification :  
INERIS 05ATEX0061X  
INE 15.0060X

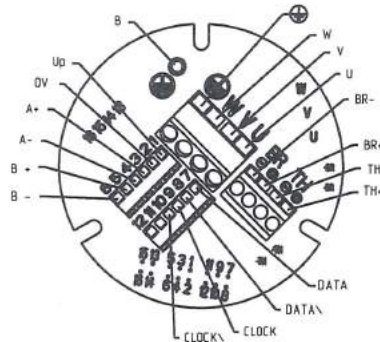
U : Phase U  
V : Phase V  
W : Phase W  
TH- : Thermic protector  
TH+ : Thermic protector  
BR- : Brake- (option)  
BR+ : Brake+ (option)  
1 : Encoder Us  
2 : Encoder gnd  
3 : Encoder refSIN  
4 : Encoder refCOS  
5 : Encoder DATA +  
6 : Encoder DATA -  
7 : Encoder +SIN  
8 : Encoder +COS  
B : Shield option (screw M4)  
Ground

### Hiperface connection Feedback letter : R/S/T/U



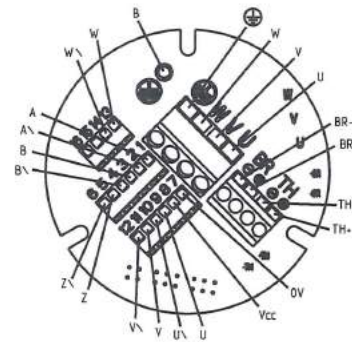
U : Phase U  
V : Phase V  
W : Phase W  
TH- : Thermic protector  
TH+ : Thermic protector  
BR- : Brake- (option)  
BR+ : Brake+ (option)  
1 : Encoder up 5V  $\pm 5\%$   
2 : Encoder OV  
3 : Encoder A+  
4 : Encoder A-  
5 : Encoder B+  
6 : Encoder B-  
7 : Encoder Data  
8 : Encoder Data\   
9 : Encoder Clock  
10 : Encoder Clock\   
B : Shield option (screw M4)

### Endat connection Feedback letter : V/W



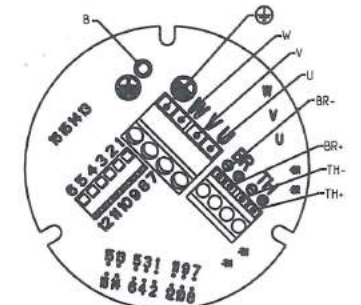
U : Phase U  
V : Phase V  
W : Phase W  
TH- : Thermic protector  
TH+ : Thermic protector  
BR- : Brake- (option)  
BR+ : Brake+ (option)  
1 : A  
2 : A\   
3 : B  
4 : B\   
5 : Z  
6 : Z\   
7 : 0  
8 : Vcc  
B : Shield option (screw M4)  
Ground

### Low cost encoder connection Feedback letter : X



U : Phase U  
V : Phase V  
W : Phase W  
TH- : Thermic protector  
TH+ : Thermic protector  
BR- : Brake- (option)  
BR+ : Brake+ (option)  
B : Shield option (screw M4)  
Ground

### Sensorless connection Feedback letter : Y



#### ENCODER SETTINGS

##### Resolver setting Feedback letter : A/G

Motor powered by direct current at the current nominal value (W+ and V-). The shift is 90° electrical.

##### Hiperface SKS/SKM setting Feedback letter : R/S

Motor powered by direct current at the current nominal value (W+ and V-). Value in encoder memory is 205.

##### Hiperface SRS/SRM setting Feedback letter : T/U

Motor powered by direct current at the current nominal value (W+ and V-). Value in encoder memory is 1638.

##### Endat setting Feedback letter : V/W

Motor powered by direct current at the current nominal value (W+ and V-). Value in encoder memory is 410.

##### Low cost encoder setting Feedback letter : X

Engine driven clockwise shaft end side. Switching signal V is in phase with FEM UV.

Sheet : 2/2

<p>General tolerances</p> <p>DIN ISO 2768 mK</p>	Dessine	14/09/09	OD	Vise	09/05/17 55
	C	AM 24578	31/01/17	TD	
	B	AM 24108	22/04/13	SD	
	A	AM23304	10/12/09	SD	D AM 24677 27/04/17 TD

Echelle  
2:5



4 Bd Eiffel, CS 40090  
21604 LONGVIC CEDEX

EX800  
OUTLINE DRAWING

Format	F	E	S	G	I
A3	x	x			
344664					D