

WEIGHT

Without brake	With brake
2.8 kg	3.2 kg

BRAKE

Supply voltage : 24V ±10%
Static torque

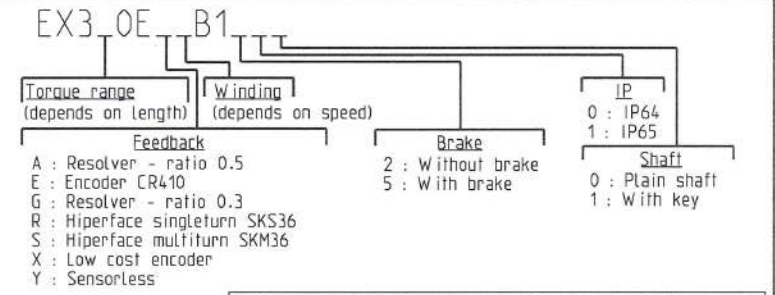
	EX310
20°C	2 Nm
100°C	1.8 Nm

Ex
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"> IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements. IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d". 	<ul style="list-style-type: none"> IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements. IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d". IEC/EN 60079-31 : Explosive atmospheres. Part 31 : Equipment dust ignition protection by enclosure "1".

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	07/08/14 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

Format A3

F E S G I
x

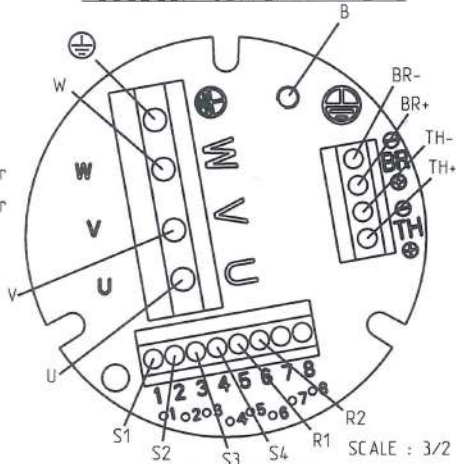
344487

Sheet : 1/2

OUTLINE DRAWING

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



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

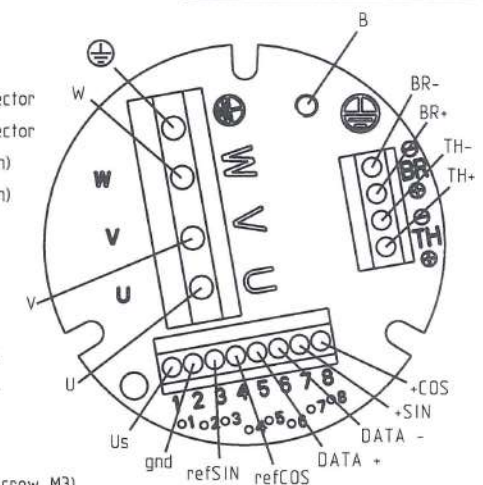
Rotar is rotating in clockwise viewed from shaft end view.



Certification :
INERIS 03ATEX0060X
INE 15.0060X

Hiperface connection
Feedback letter : R/S

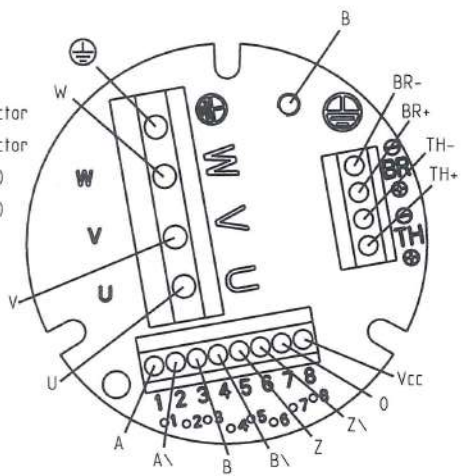
- U : Phase U
- V : Phase V
- W : Phase W
- TH- : Thermic protector
- TH+ : Thermic protector
- BR- : Brake- (option)
- BR+ : Brake+ (option)
- 1 : Encoder Us
- 2 : Encoder gnd
- 3 : Encoder refSIN
- 4 : Encoder refCOS
- 5 : Encoder DATA +
- 6 : Encoder DATA -
- 7 : Encoder +SIN
- 8 : Encoder +COS
- B : Shield option (screw M3)
- ⊕ : Ground



SCALE : 3/2

Low cost encoder connection
Feedback letter : X

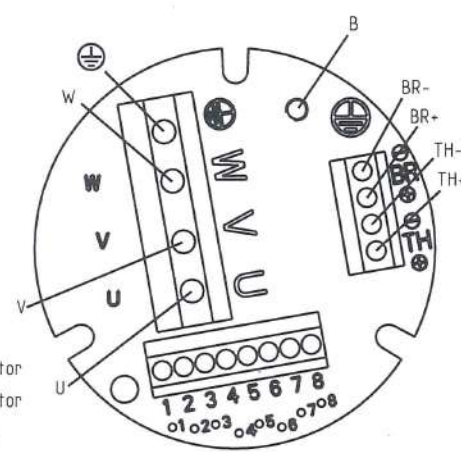
- U : Phase U
- V : Phase V
- W : Phase W
- TH- : Thermic protector
- TH+ : Thermic protector
- BR- : Brake- (option)
- BR+ : Brake+ (option)
- 1 : A
- 2 : A\
- 3 : B
- 4 : B\
- 5 : Z
- 6 : Z\
- 7 : 0
- 8 : Vcc
- B : Shield option (screw M3)
- ⊕ : Ground



SCALE : 3/2

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 M3)
- ⊕ : Ground



SCALE : 3/2

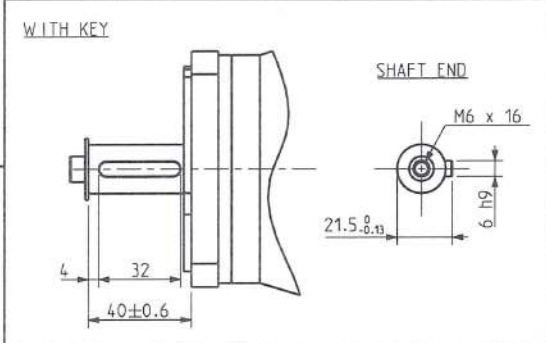
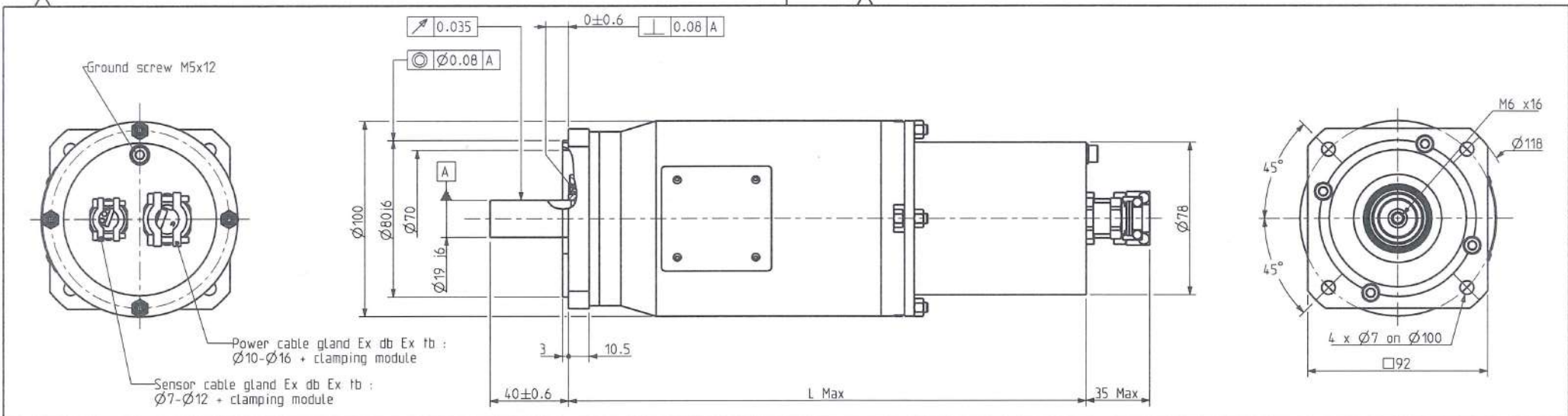
ENCODER SETTINGS

Resolver setting
Feedback letter : A/E/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.

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	11/09/09	OD	Vise	09/61-172 50	Echelle 3:10	 4 Bd Eiffel, CS 40090 21604 LONGVIC CEDEX	EX300	Format	F	E	S	G	I		
		Modifications	C	AM 24108	22/04/13	SD					A3	x					
			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				
OUTLINE DRAWING										344487			E				



WEIGHT

Motor	Without brake	With brake
EX420	7 Kg	8 Kg
EX430	8 Kg	9 Kg

BRAKE

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

Static torque

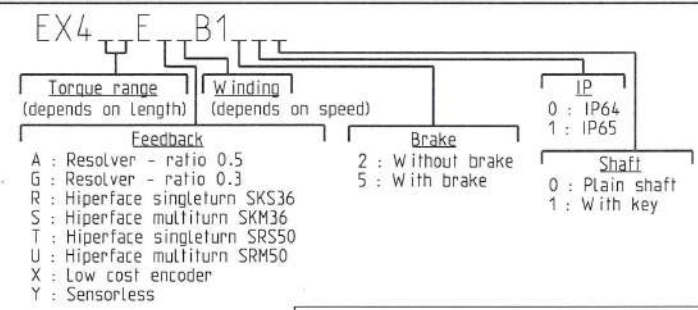
	EX420	EX430
20°C	5.5 N.m	5.5 N.m
100°C	4 N.m	4 N.m

Certification :
INERIS 04ATEX0097X
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"> IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements. IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d". 	<ul style="list-style-type: none"> IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements. IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d". IEC/EN 60079-31 : Explosive atmospheres. Part 31 : Equipment dust ignition protection by enclosure "1".

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 SRM50 (U)
EX420	Without brake	L (mm)		265		285		305	
	With brake	L (mm)		290		310		330	
EX430	Without brake	L (mm)		290		310		330	
	With brake	L (mm)		315		335		355	



CONNECTIONS VARIANTS ON SHEET 2/2

Masse :

General tolerances : DIN ISO 2768 mK

Dessine : 29/07/09 SD Vise : 05/05/17 JB

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

Echelle : 1:2

Parker

4 Bd Eiffel. CS 40090
21604 LONGVIC CEDEX

EX400

Format A3

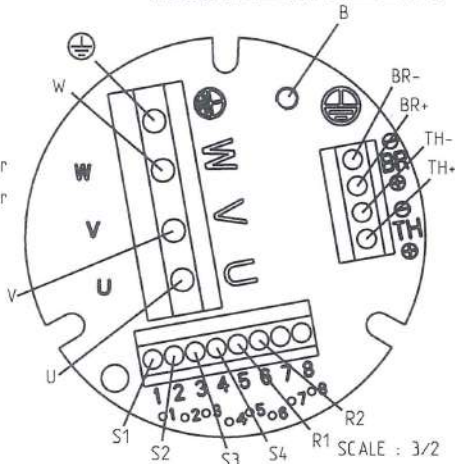
F x E S G I

344619

Sheet : 1/2

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 M3)	S1 = Cos +	S2 = Sin +	R1 = Excitation +
⊕ : Ground	S3 = Cos -	S4 = Sin -	R2 = Excitation -

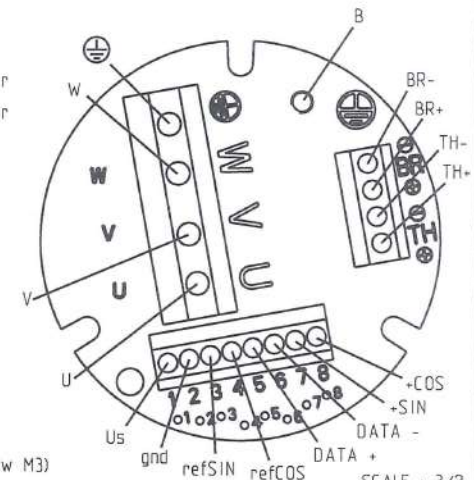
Rotor is rotating in clockwise viewed from shaft end view.



Certification :
INERIS 04ATEX0097X
INE 15.0060X

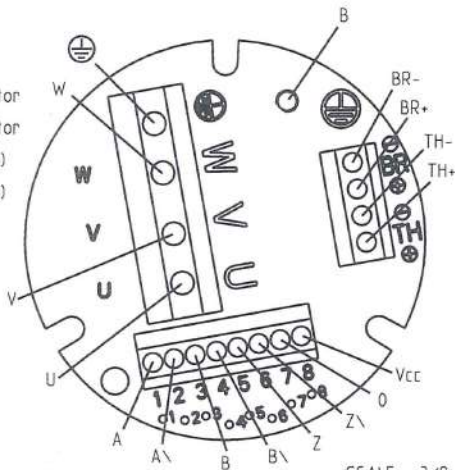
Hiperface connection
Feedback letter : R/S/T/U

- 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 M3)
- ⊕ : Ground



Low cost encoder connection
Feedback letter : X

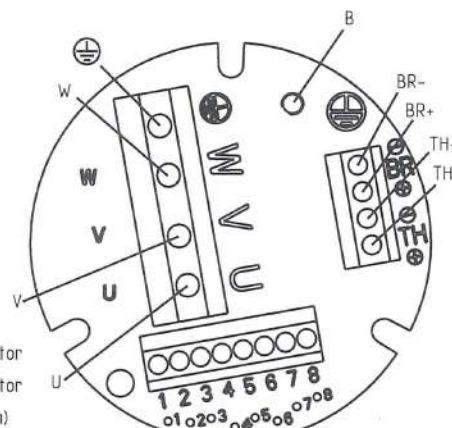
- U : Phase U
- V : Phase V
- W : Phase W
- TH- : Thermic protector
- TH+ : Thermic protector
- BR- : Brake - (option)
- BR+ : Brake + (option)



- 1 : A
- 2 : A\
- 3 : B
- 4 : B\
- 5 : Z
- 6 : Z\
- 7 : 0
- 8 : Vcc
- B : Shield option (screw M3)
- ⊕ : Ground

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 M3)
- ⊕ : Ground



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 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.

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.

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

Masse :

General tolerances

Dessine	29/07/09	SD	Vise	02/05/14	SD	SD
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

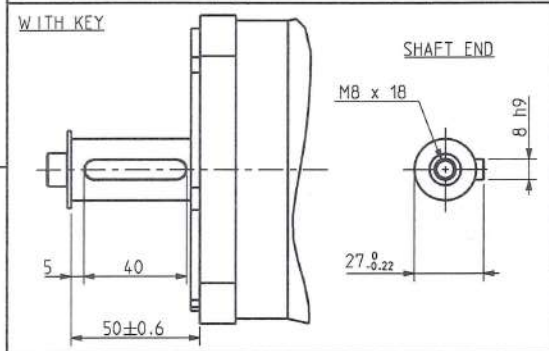
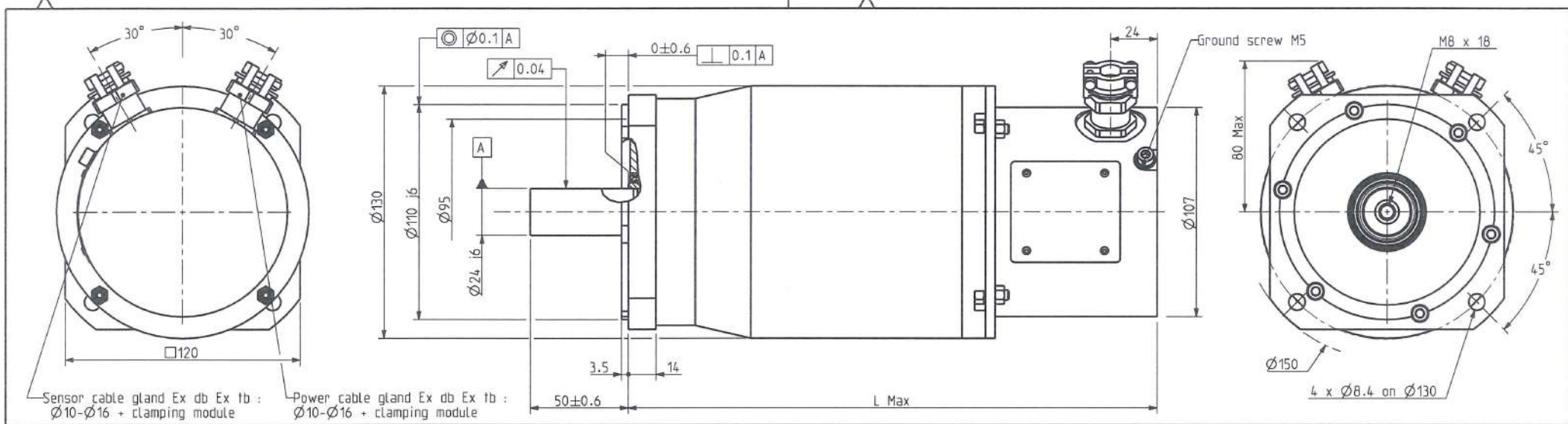
Echelle
1:2



EX400

OUTLINE DRAWING

Format	F	E	S	G	I
A3	x				
344619					
E					



WEIGHT

Motor	Without brake	With brake
EX620	10 Kg	11 Kg
EX630	12.5 Kg	13.5 Kg

BRAKE

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

	EX620	EX630
20 °C	12 N.m	12 N.m
100 °C	8 N.m	8 N.m

Ex (Yellow hexagon)

IEC (Blue logo)

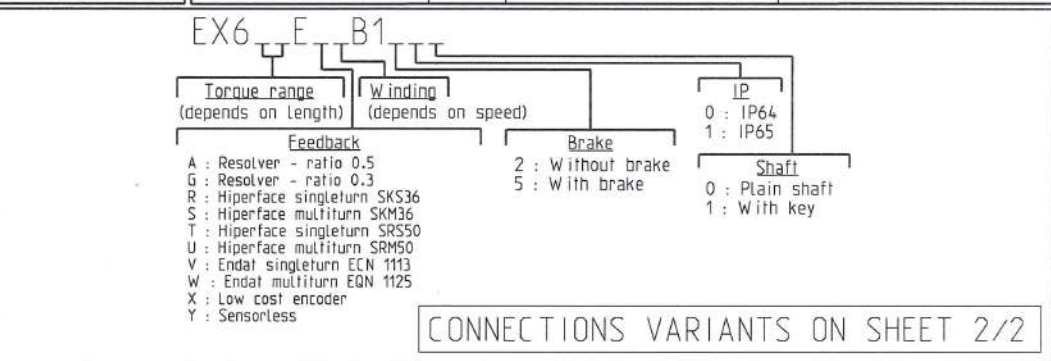
IECEx (Blue logo)

Certification :
INERIS 04ATEX0032X
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"> IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements. IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d". 	<ul style="list-style-type: none"> IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements. IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d". IEC/EN 60079-31 : Explosive atmospheres. Part 31 : Equipment dust ignition protection by enclosure "I".

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 SRM50 (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	



Masse :

General tolerances: DIN ISO 2768 mK

Dessine: 07/10/09 SD, Vise: 05/05/12 JB

Modifications: C AM 24229 03/12/13 AH, B AM 24108 22/04/13 SD, A AM 23304 10/12/09 SD

Echelle: 1:2

Parker logo

4 Bd Eiffel. CS 40090 21604 LONGVIC CEDEX

EX600

Format: A3

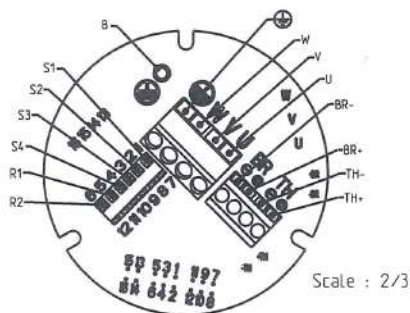
F E S G I: x

344550

Sheet : 1/2

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.

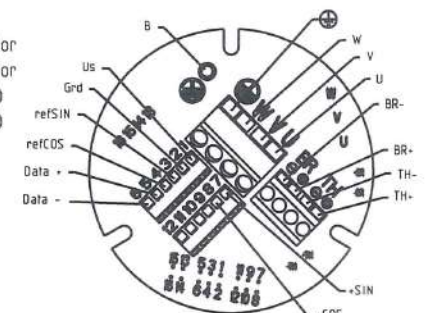
Scale : 2/3



Certification :
INERIS 04ATEX0032X
INE 15.0060X

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

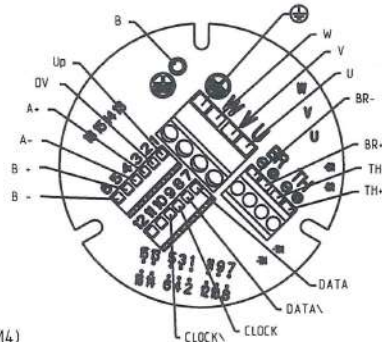
- U : Phase U
- V : Phase V
- W : Phase W
- TH- : Thermic protector
- TH+ : Thermic protector
- BR- : Brake - (option)
- BR+ : Brake + (option)
- 1 : Encoder Us
- 2 : Encoder gnd
- 3 : Encoder refSIN
- 4 : Encoder refCOS
- 5 : Encoder Data +
- 6 : Encoder Data -
- 7 : Encoder + SIN
- 8 : Encoder + COS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



Scale : 2/3

Endat connection
Feedback letter : V/W

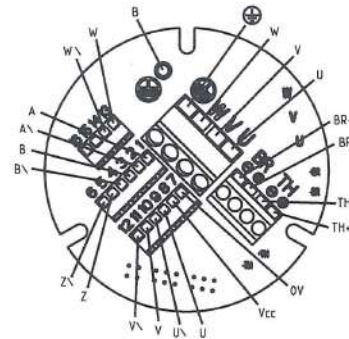
- U : Phase U
- V : Phase V
- W : Phase W
- TH- : Thermic protector
- TH+ : Thermic protector
- BR- : Brake - (option)
- BR+ : Brake + (option)
- 1 : Encoder Up 5V ±5%
- 2 : Encoder OV
- 3 : Encoder A +
- 4 : Encoder A -
- 5 : Encoder B +
- 6 : Encoder B -
- 7 : Encoder DATA
- 8 : Encoder DATA\
- 9 :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



Scale : 2/3

Low cost encoder connection
Feedback letter : X

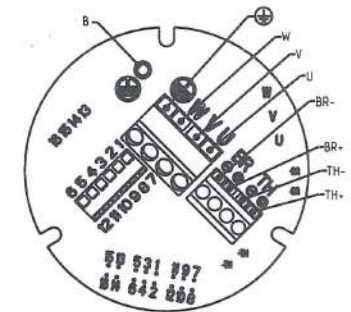
- U : Phase U
- V : Phase V
- W : Phase W
- TH- : Thermic protector
- TH+ : Thermic protector
- BR- : Brake - (option)
- BR+ : Brake + (option)
- 1 : A 9 : U
- 2 : A\ 10 : U\
- 3 : B 11 : V
- 4 : B\ 12 : V\
- 5 : Z 13 : W
- 6 : Z\ 14 : W\
- 7 : 0
- 8 : Vcc
- B : Shield option (screw M4)
- ⊕ : Ground



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.

Sheet : 2/2

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	E	AM 24677 27/04/17 TD		
	A	AM 23304 10/12/09 SD	D	AM 24578 22/07/16 SD		

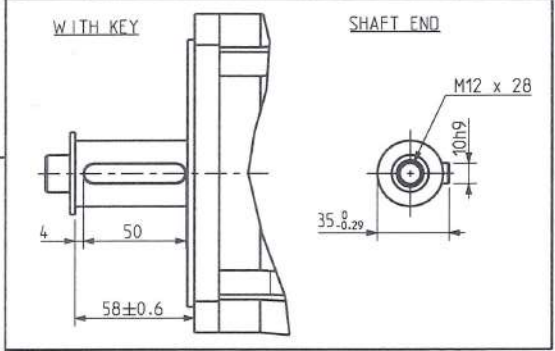
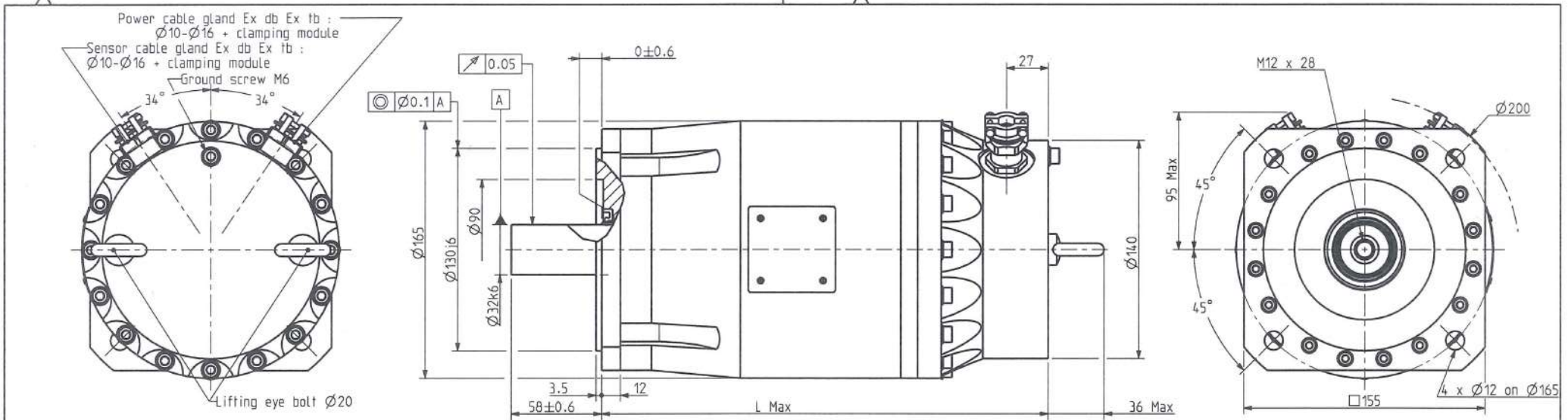
Echelle
1:2



EX600

OUTLINE DRAWING

Format	F	E	S	G	I
A3	x	x			
344550					E



WEIGHT

Motor	Without brake	With brake
EXB20	22 kg	25 kg
EXB40	28 kg	31 kg
EXB60	38 kg	41 kg

BRAKE

Supply voltage : 24V ±10%
 Static torque

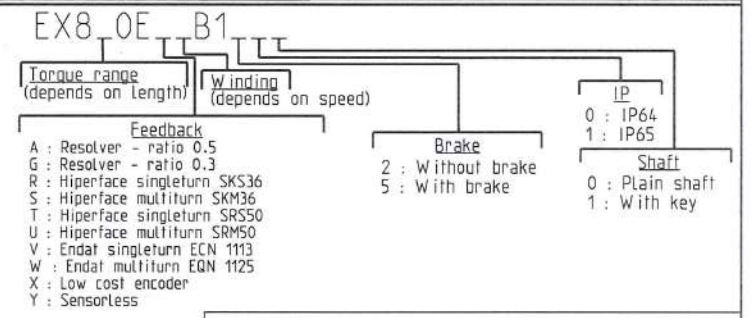
	EXB20	EXB40	EXB60
20°C	36 Nm	36 Nm	36 Nm
100°C	32 Nm	32 Nm	32 Nm

Ex
 IEC IECEx
 Certification :
 INERIS 05ATEX0061X
 INE 15.0060X

	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"> IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements.. IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d". 	<ul style="list-style-type: none"> IEC/EN 60079-0 : Explosive atmospheres. Part 0 : Equipment General requirements. IEC/EN 60079-1 : Explosive atmospheres. Part 1 : Equipment protection by flameproof enclosures "d". IEC/EN 60079-31 : Explosive atmospheres. Part 31 : Equipment dust ignition protection by enclosure "t".

DIMENSIONS

	Feedback option (feedback letter)	Resolver ratio 0.5 (A)	Low cost encoder (X)	Sensorless (Y)	Hiperface SKS36 (R)	Hiperface SKM36 (S)	Hiperface SRS50 (T)	Hiperface SRM50 (U)	Endat ECN 1113 (V)	Endat EQN 1125 (W)
EXB20	without brake	L (mm)	290		310			325		
	with brake	L (mm)	325		345			360		
EXB40	without brake	L (mm)	350		370			385		
	with brake	L (mm)	385		405			420		
EXB60	without brake	L (mm)	410		430			445		
	with brake	L (mm)	445		465			480		

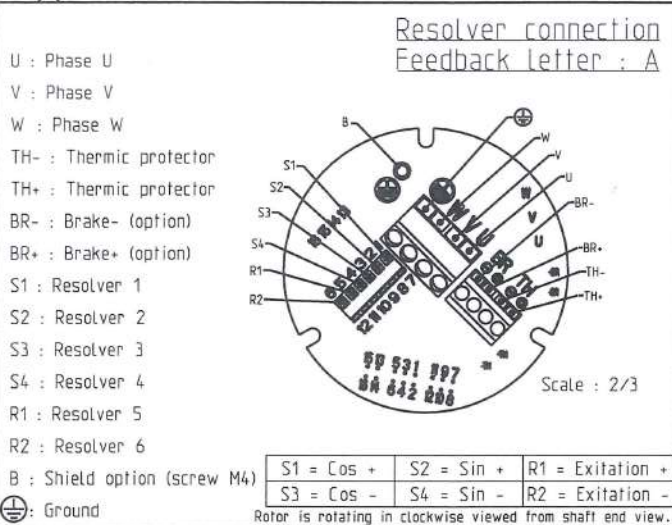


CONNECTIONS VARIANT ON SHEET 2/2

Sheet : 1/2

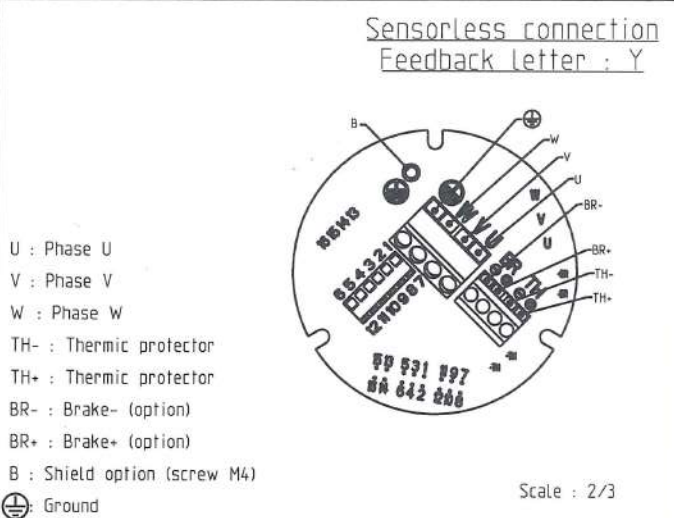
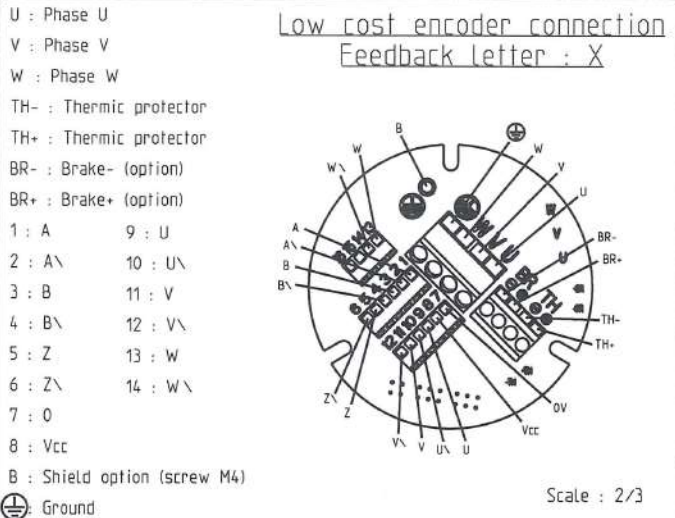
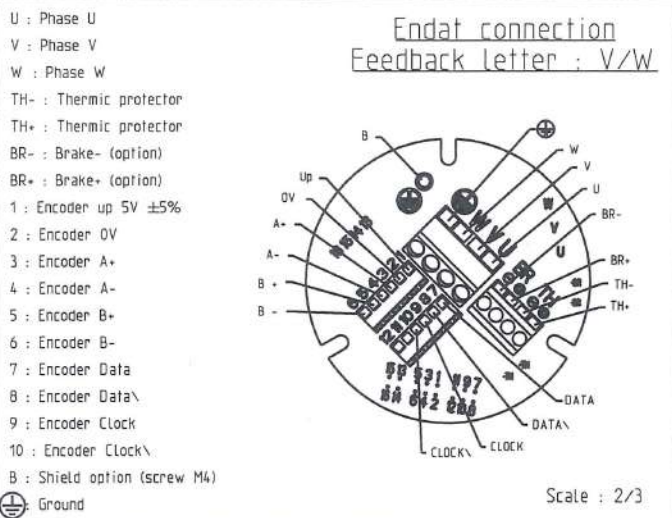
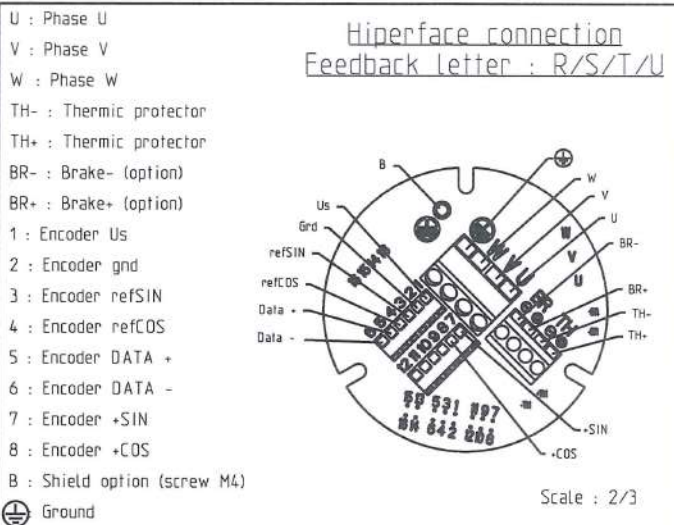
General tolerances DIN ISO 2768 mK	Dessine	14/09/09	DD	Vise	07/05/192		Echelle 2:5	 4 Bd Eiffel. CS 40090 21604 LONGVIC CEDEX	EX800	Format	A3	F	E	S	G	I
	Modifications	C	AM 24607	26/06/16	SD					x						
	A	AM 23304	10/12/09	SD		D				AM 24677	27/04/17	TD				

OUTLINE DRAWING 344664 D



IEC IECEx Ex

Certification :
INERIS 05ATEX0061X
INE 15.0060X



ENCODER SETTINGS	
<p><u>Resolver setting</u> Feedback letter : A/G</p> <p>Motor powered by direct current at the current nominal value (W+ and V-). The shift is 90° electrical.</p>	<p><u>Hiperface SKS/SKM setting</u> Feedback letter : R/S</p> <p>Motor powered by direct current at the current nominal value (W+ and V-). Value in encoder memory is 205.</p>
<p><u>Hiperface SRS/SRM setting</u> Feedback letter : T/U</p> <p>Motor powered by direct current at the current nominal value (W+ and V-). Value in encoder memory is 1638.</p>	<p><u>Endat setting</u> Feedback letter : V/W</p> <p>Motor powered by direct current at the current nominal value (W+ and V-). Value in encoder memory is 410.</p>
<p><u>Low cost encoder setting</u> Feedback letter : X</p> <p>Engine driven clockwise shaft end side. Switching signal V is in phase with FEM UV.</p>	

		Dessine 14/09/09		OD	Vise 09/05/17	50		Sheet : 2/2		
General tolerances DIN ISO 2768 mK	Modifications	C	AM 24578	31/01/17	TD			Echelle 2:5	EX800	
		B	AM 24108	22/04/13	SD					Format A3
		A	AM23304	10/12/09	SD	D	AM 24677			
						4 Bd Eiffel, CS 40090 21604 LONGVIC CEDEX		OUTLINE DRAWING	344664	