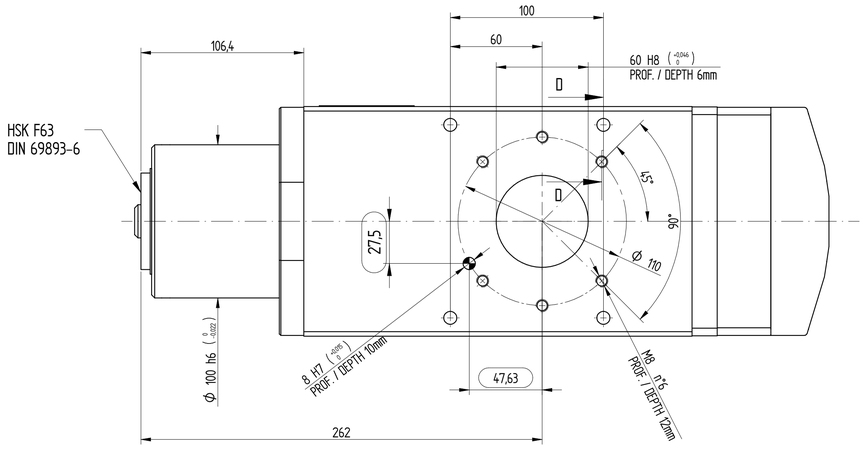
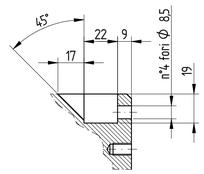
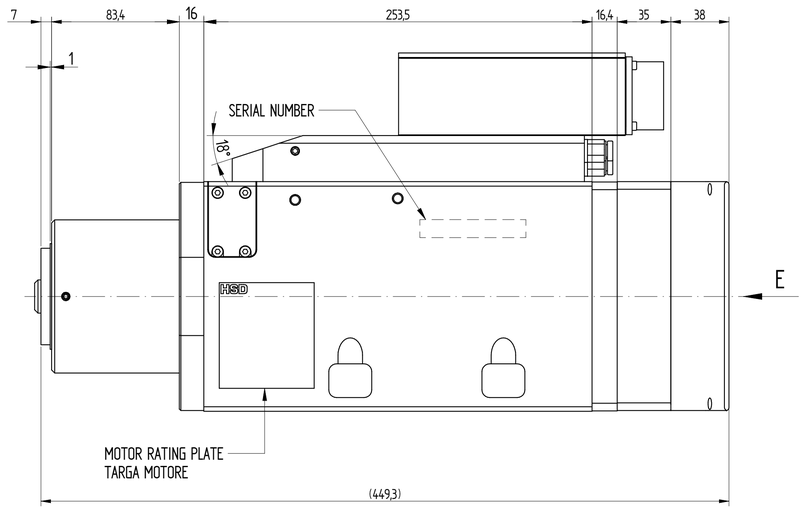


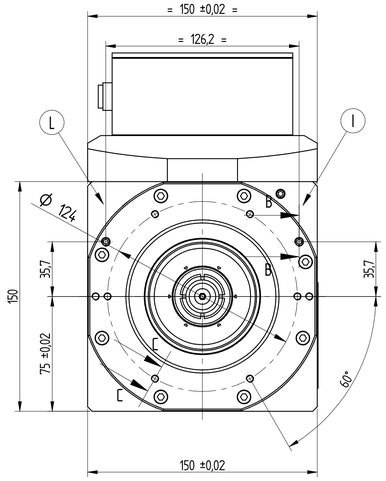


SEZIONE D-D

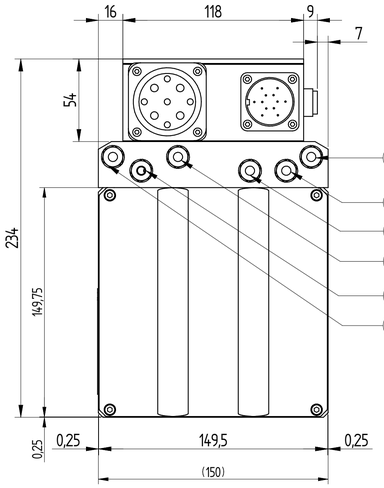
SENSORS AND THEIR BEHAVIOR / SENSORI E LORO COMPORTAMENTO						
SENSORS / SENSORI						
S1	*DRAWBAR POSITION: TOOL PRESENT*	PRESENZA UTENSILE				
S1+S4	*DRAWBAR POSITION: TOOL CORRECTLY CLAMPED*	UTENSILE CORRETTAMENTE AGGANCIATO				
S2	*DRAWBAR POSITION: TOOL UNCLAMPED*	UTENSILE ESPULSO				
S3	*SHAFT STOPPED (2 CPR)*	CONTAIMPULSI (2 IMPULSI PER GIRO)				
POSITION	/ POSIZIONE		S1	S4	S1+S4	S2
P1	*TOOL UNCLAMPED*	UTENSILE ESPULSO	0	0	0	1
P2	*TOOL CLAMPED*	UTENSILE AGGANCIATO	1	1	1	0
P3	*CLAMPED WITHOUT TOOL OR TOO LONG / TOO SHORT TOOL CLAMPED*	ASSENZA UTENSILE O UTENSILE TROPPO LUNGO/CORTO	0/1	0/1	0	0

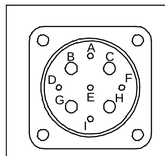
UTENZE PNEUMATICHE E IDRAULICHE PENUMATIC & HYDRAULIC CONNECTIONS	
RIF	**DESCRIZIONE / DESCRIPTION**
A	Ø6 - Ingresso liquido refrigerante utensile / Tool cooling liquid inlet
B	Ø6 - Ingresso liquido refrigerante utensile / Tool cooling liquid inlet
C	Ø6 - Ingresso liquido refrigerante elettromandrino / Electrospindle cooling liquid inlet
D	Ø6 - Uscita liquido refrigerante elettromandrino / Electrospindle cooling liquid outlet
E	Ø6 - 4bar - Ingresso aria pressurizzazione e pulizia cono / Pressurization and cone cleaning air inlet
F	Ø6 - 10bar - Ingresso/uscita aria per cambio utensile / Tool release air I/O





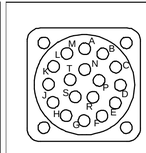
VISTA DA E





POWER CONNECTOR

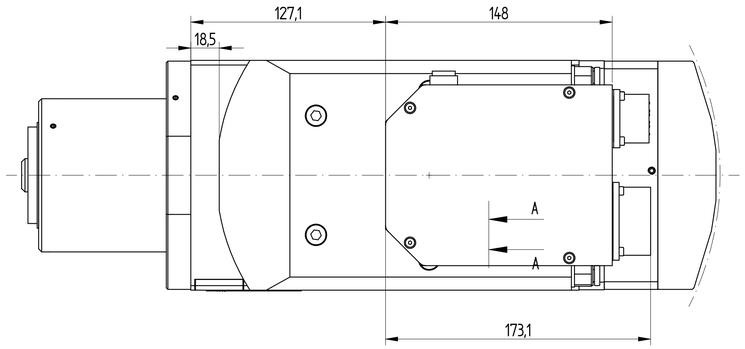
PIN	DESCRIZIONE
G	Fase motore U - Motor phase U
H	Fase motore V - Motor phase V
C	Fase motore W - Motor phase W
B	Connessione di Terra – Ground
E	Protezione termica motore – Thermic Motor Alarm
F	Protezione termica motore – Thermic Motor Alarm

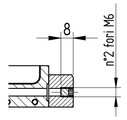


SIGNAL CONNECTOR

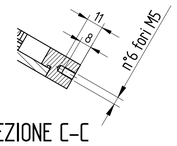
PIN	DESCRIZIONE
A	OUTPUT sensor S2 (utensile espulso-tool unlocked)
B	OUTPUT serie sensors S1+S4 (utensile bloccato-tool locked)
C	OUTPUT sensor S3 (albero fermo – shaft not running)
D	+24V CC alimentazione/feeding sensors: S1, S2, S3
E	+24V CC alimentazione/feeding lamp of the pushbutton - LAMPADINA del pulsante
F	0V alimentazione/feeding sensors S1, S2, S3, S4
G	+24V CC alimentazione/feeding PULSANTE push/button e Sensor SC (Azzeramento Asse C - Zeroing for C-Axis)
H	OUTPUT PULSANTE/pushbutton
J	0V alimentazione/feeding LAMPADINA – lamp of the pushbutton, sensore SC –sensor C-Axis.
L	OUTPUT sensore SC – sensor C-Axis (azzeramento Asse C – Zeroing for C-Axis)
M	Per manutenzione - Maintenance
N	
P	
K	
R	
S	
T	

CONNETTORI FEMMINA FORNITI A CORREDO
FEMALE CONNECTOR INCLUDED

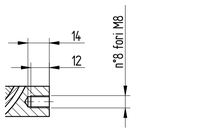




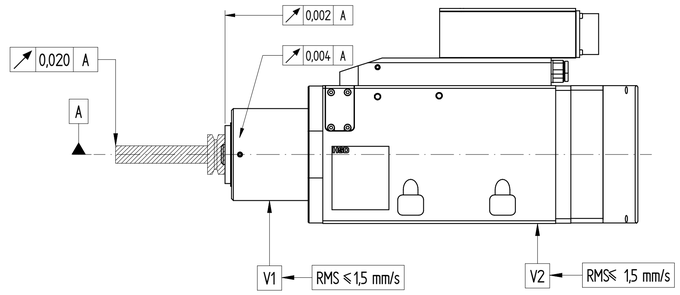
SEZIONE B-B



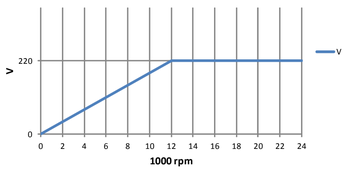
SEZIONE C-C

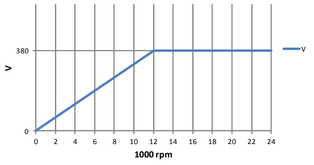


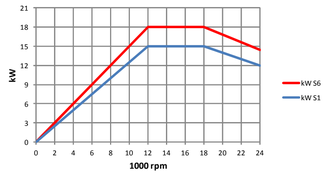
SEZIONE A-A

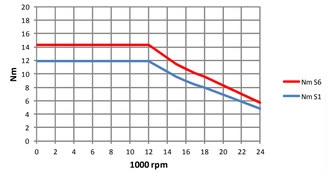


DATASHEET / SCHEDA MOTORE		
TOOL-HOLDER TYPE	TIPO PORTAUTENSILE	HSK F63
WEIGHT	PESO	~36 kg
ROTATION	VERSO DI ROTAZIONE	↻↺
ROTOR INTERTIA	INERZIA ROTORICA	3,8*e-03 kg*m²
WORKING POSITION	POSIZIONE DI LAVORO	↕ ↔
BEARINGS LUBRICATION	LUBRIFICAZIONE CUSCINETTI	*Grease* / Grasso
MOTOR COOLANT	REFRIGERANTE MOTORE	Liquid / Liquido
TOOL BALANCING LEVEL	GRADO DI EQUILIBRATURA UTENSILI	G1 (max 0.02 g)
MOTOR TYPE	CLASSIFICAZIONE MOTORE	*Three-phase asynchronous* *As* incrono trifase
RATED POWER	POTENZA NOMINALE	15 Kw
RATED TORQUE	COPPIA NOMINALE	11,9 Nm
RATED VOLTAGE	TENSIONE NOMINALE	380 V - 220 V
RATED CURRENT 220V	CORRENTE NOMINALE 220V	52 A
RATED CURRENT 380V	CORRENTE NOMINALE 380V	30 A
RATED SPEED	VELOCITA' NOMINALE	12'000 RPM
MAX SPEED	VELOCITA' MASSIMA	24'000 RPM
EFFICIENCY	RENDIMENTO	0,84
POWER FACTOR	FATTORE DI POTENZA	0,87
POLES NUMBER	NUMERO DI POLI	4
INSULATION CLASS	CLASSE DI ISOLAMENTO	F
INDEX PROTECTION	GRADO DI PROTEZIONE IP	54









Tensione nominale (*)	Nennspannung (*)	*Rated voltage (*)*	V	380		380		380		380		220		220		220	
Frequenza nominale	Nennfrequenz	*Rated frequency*	Hz	400		500,0		600		800		400		500		600		800	
Velocità nominale	Geschwindigkeit	*Rated speed*	rpm	12000		15000		18000		24000		12000		15000		18000		24000	
Tipo di servizio	Betriebsart	*Duty type*		S1 cont.	***S6 60%***	S1 cont.	***S6 60%***	S1 cont.	***S6 60%***	S1 cont.	***S6 60%***	S1 cont.	***S6 60%***	S1 cont.	***S6 60%***	S1 cont.	***S6 60%***	S1 cont.	***S6 60%***
Potenza nominale	Nennleistung	*Rated power*	kW	15	***18***	15	***18***	15,00	***18***	12	***14,5***	15	***18***	15	***18***	15	***18***	12	***14,5***
	Nenndrehmoment	*Rated torque*	Nm	11,9	***14,3***	9,5	***11,5***	8,0	***9,5***	4,8	***5,8***	11,9	***14,3***	9,5	***11,5***	8,0	***9,5***	4,8	***5,8***
Corrente nominale	Nennstrom	*Rated current*	A	30,0	***35,9***	31,0	***35,0***	30,0	***36,0***	25,0	***30,0***	52,0	***61,4***	53,7	***60,6***	51,9	***62,9***	43,3	***51,9***

RIPRODUZIONE E/O DIFFUSIONE VIETATA
REPRODUCTION AND/OR DISCLOSURE OF THE DRAWING IS FORBIDDEN

REV.	DESCRIZIONE REVISIONE / *REVISION DESCRIPTION*	N°REV	DATA / *DATE*	FIRMA / *SIGN*
		–		
		–		
		–		

DISEGNATO / *DRAWN BY*	CONTROLLATO / *CHECKED BY*	APPROVATO / *APPROVED*	PESO / *WEIGHT*: 40,038 kg
DATA / *DATE* 22/04/2016	22/04/2016		GREZZO DI / *RAW* :
FIRMA / *SIGN* Bernabucci L.	Bugari M.		

MATERIALE / *MATERIAL* :

TRATTAMENTO TERMICO / *HEAT TREATMENT* :

RIVESTIMENTO SUPERFICIALE / *SURFACE TREATMENT* :

DENOMINAZIONE / *DESCRIPTION* : ES789LF6L-1512B24CCG-BSXM

HSD DIVISION

A1

SCALA / *SCALE* : 1:2 FOGLIO / *SHEET* : 1 / 1

QUOTE SENZA INDICAZIONE DI TOLLERANZA / *POSITIONS WITHOUT TOLERANCE INFORMATION*

- LAVORAZIONI MECCANICHE / *MECHANICAL WORKINGS* :

- SALDOCARPENTERIE / *WELDMENT* :

- GETTI / *MELT CASTING* :

CICLO DI VERNICIATURA / *SURFACE TREATMENT* :

CODICE / *CODE* 6161H1497 REVISIONE / *REVISION* 0