

Engineering motordata (WIN 1557)

DC bus voltage	48 V DC
Nominal AC voltage	33 V AC (rms)
Rated voltage	27 V AC (rms)
Rated power	911 W
Rated speed	3000 rpm
Rated torque	2.90 Nm
Rated current	24.07 A (rms)
Peak torque	9.45 Nm
Peak current	103.5 A (rms)
Stall torque	3.25 Nm
Stall current	23.7 A (rms)
No load speed	3970 rpm
EMF constant ±10%	8.28 V AC (rms) / 1000rpm
Theoretical torque constant ±10%	0.137 Nm / A (rms)
Torque constant ±10% @ rated load	0.120 Nm / A (rms)
Number of poles	10
Electrical time constant	2.89 ms
Winding terminal resistance	0.083 Ω
Rotary field terminal inductance	0.24 mH

Customs info

HS Code	85015220
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Mechanical motor data (setting 48)

Max mechanical speed	12000 rpm
Mech. time constant	0.84 ms
Thermal time constant	34 min
Rotor inertia	1.1 kgcm ²
Protection	IP64
Color	RAL 9005
Cooling	Convection
Motor-only mass	2 kg

Sensors

Temperature	PT1000 {PT1000}
Feedback	EEM37 (HDSL) multi-turn, 17+12 bits

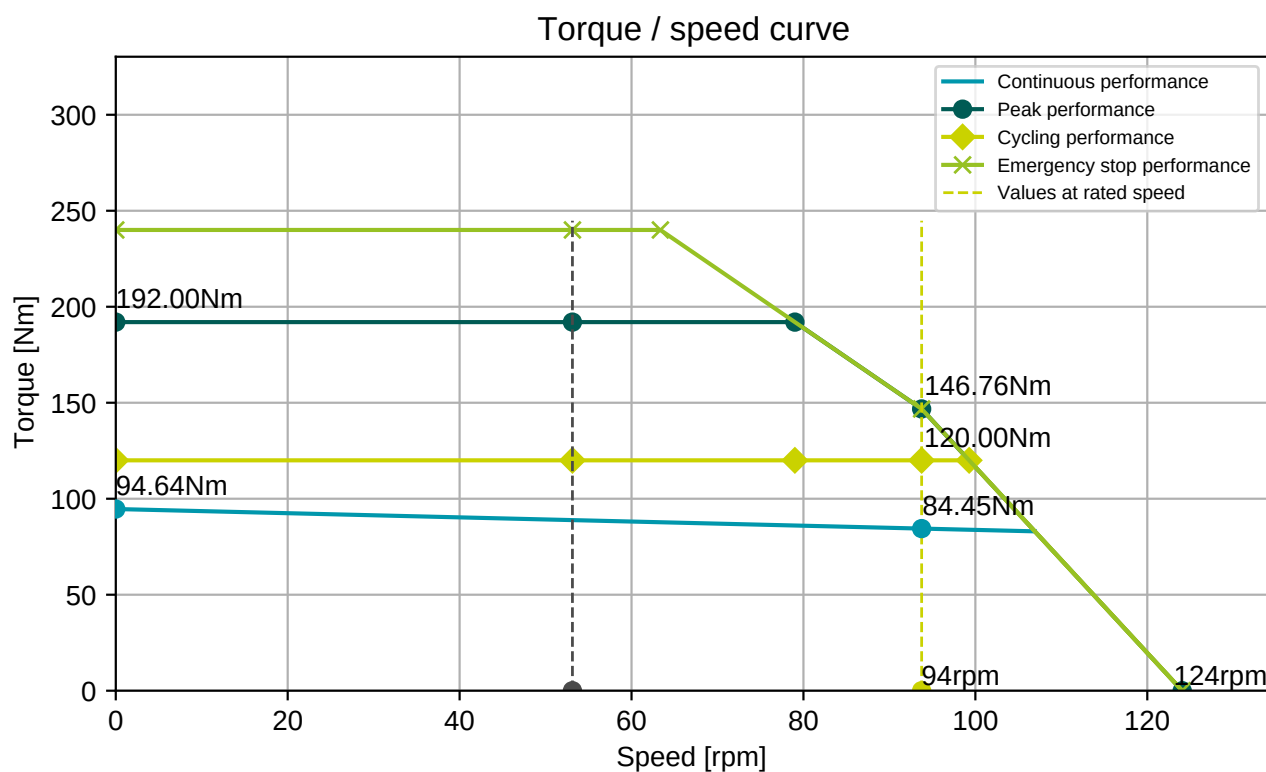
Brake

Braking torque	4.50 Nm
Voltage	24 V DC
Power @20°C	12.0 W
Current @20°C	0.50 A
Inertia	0.20 kgcm ²
Mass	0.47 kg

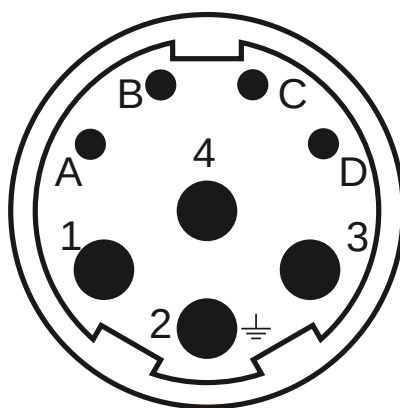
Gearbox engineering data		Gearbox mechanical data	
Gear ratio	32	Radial force for 20'000h	2050 N*
Efficiency	91 %*	Radial force for 30'000h	1700 N*
Torsional stiffness	12 Nm/arcmin	Max. radial force	2500 N*
Number of stages	2	Axial force for 20'000h	2500 N
Rated output torque	102 Nm	Axial force for 30'000h	2000 N
Cycling output torque	120 Nm	Max. axial force	3800 N
Max output torque	192 Nm	Tilting moment for 20'000h	102 Nm
Emergency output torque	240 Nm	Tilting moment for 30'000h	84 Nm
Rated input speed	4000 rpm	Max. bending moment	12 Nm
Max input speed	7000 rpm	Output shaft design	Shaft key
Operating temperature	<-25; 90> °C	Mass	4.97 kg
Max. backlash	< 15 arcmin	Input inertia	0.87 kgcm ²
Service life	20000 h	Protection	IP54
* at rated speed & torque		* Defined for point of action at ½ output shaft length	

Lubrication	
Type	Standard
Lubricant	Grease (lifetime lubrication)

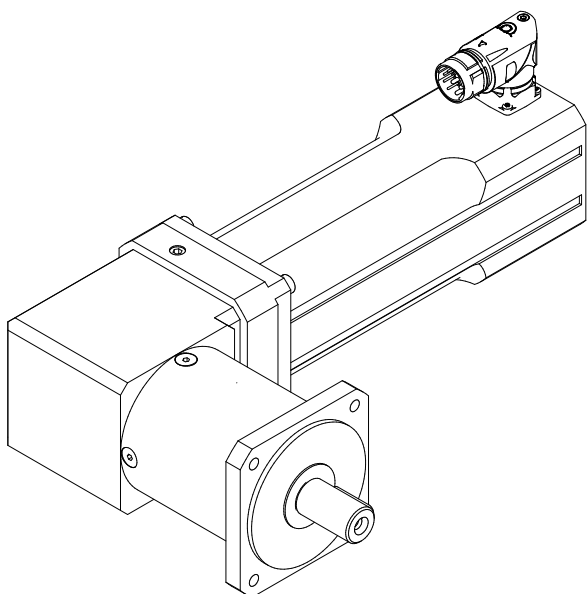
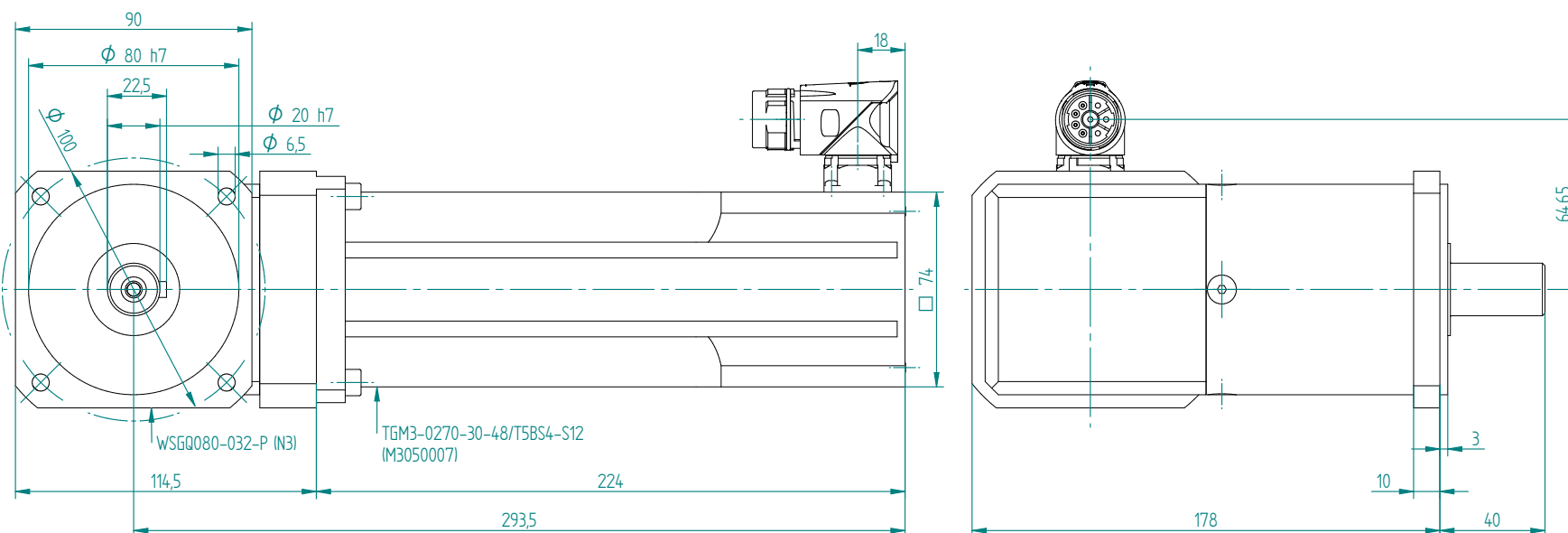
Actuator data	
Rated speed	94 rpm
Rated torque	84.45 Nm
Cycling torque	120.00 Nm
Peak torque	192.00 Nm
Emergency stop torque	240.00 Nm
EMF constant ±10%	265.0 V AC (rms) / 1000rpm
Torque constant ±10% @ rated load	3.51 Nm / A (rms)
Total mass	7.44 kg
Output inertia	2017.3 kgcm ²


BGC110N00001216000

M23, 8 poles, rotary

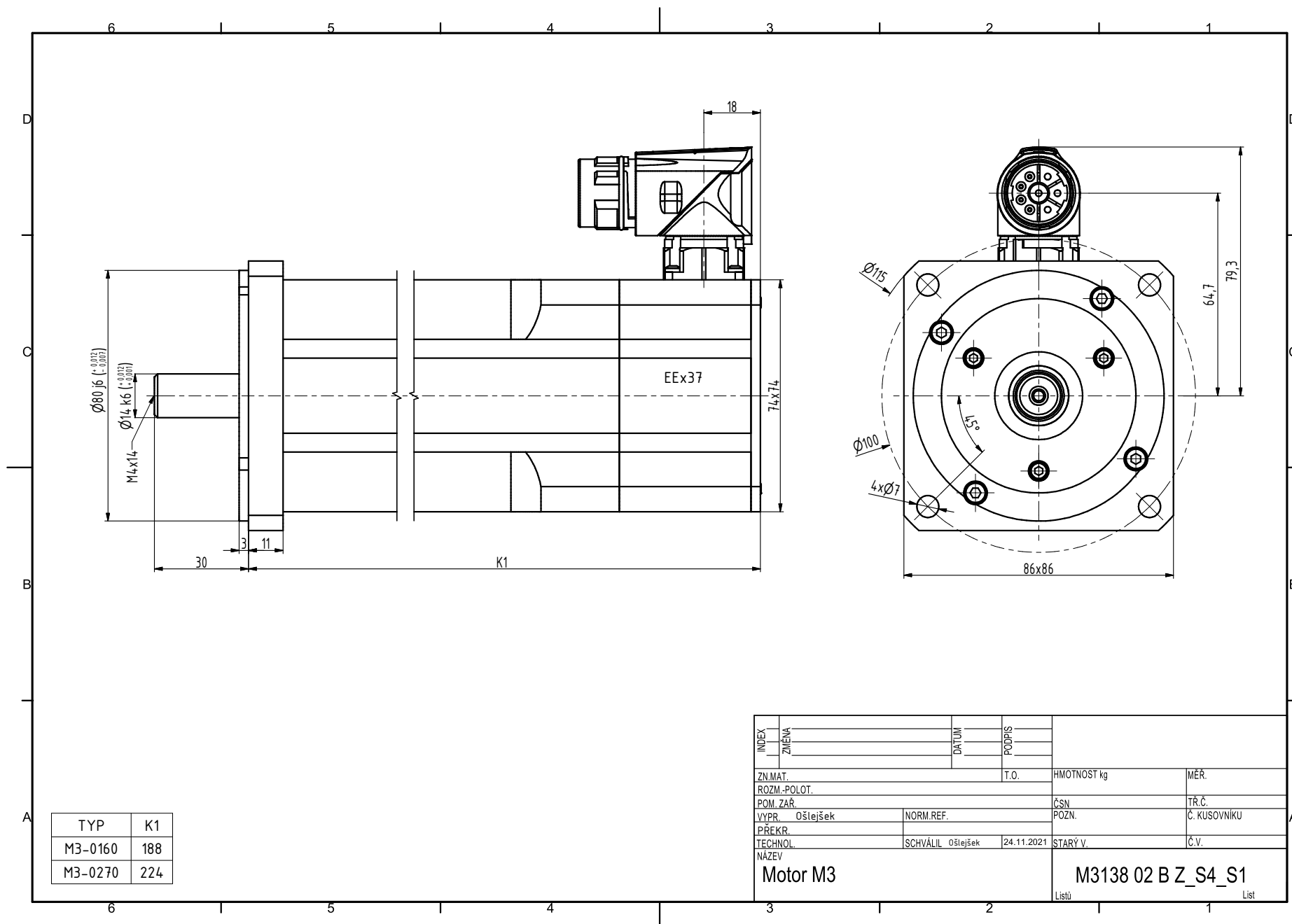

Connector 1 (283)

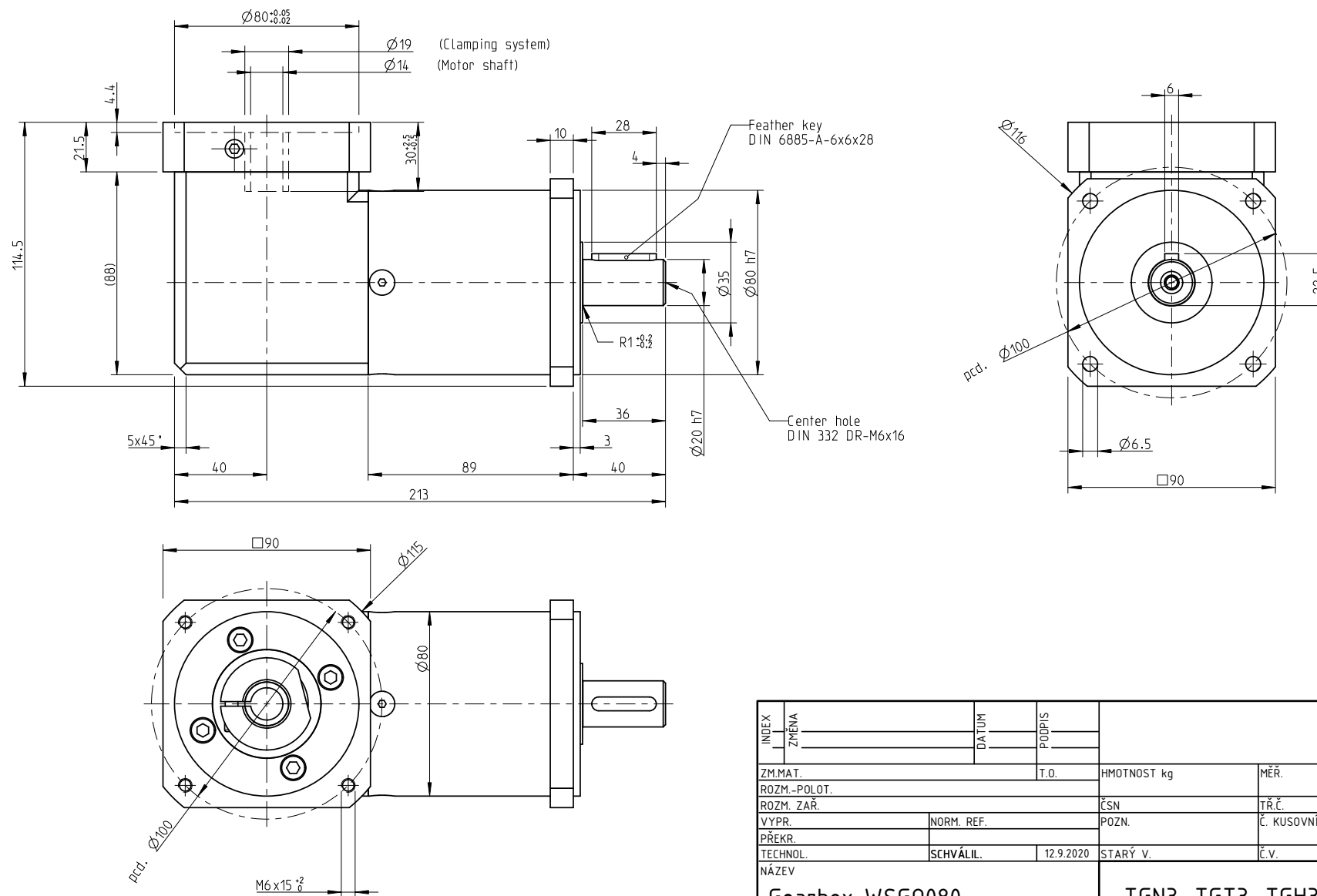
1	U
4	V
3	W
2	PE
A	Brake+
B	Brake-
C	GND/DSL-
D	+Us/DSL+



Bill of materials			
Part Name	Quantity	Type	Tools
Screw_DIN 912_A4 - 70_M6x25	4	A4 - 70	inbus - M6

Drawn:	Stjepan Bednar	Created:	13.06.2025	Modified:	13.06.2025
Checked / approved by:	---	PROJECT NAME:	Gearbox WSGQ080-032-P (N3)		
Material:	NUMBER - TITLE: WSGQ080-032-P (N3)				
Semiprod.					
Project IDs					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM ANGLES =XXX° or =XXXX°, 2 PL =XXX, 3 PL =XXXX		SIZE A3	QUANTITY:	REVISION: ---	
Designer: Bednar	 TG drives Olomoucká 126/079 627 00 Brno Czech republic		1316-1316-00000000000000000000-002-P N3W000000-032-P N301		
Mail: bednar@tgdriives.cz			SCALE: WEIGHT:	SHEET 1 OF 3	
Tel: +420 724844770					





INDEX	ZMĚNA	DATUM	PODPIS		
ZMMAT.			T.O.	HMOTNOST kg	MĚR.
ROZM.-POLOT.					
ROZM. ZAR.				ČSN	TRČ.
VYPR.	NORM. REF.			POZN.	Č. KUSOVNÍKU
PŘEKR.					
TECHNOL.	SCHVÁLIL.	12.9.2020		STARÝ V.	Č.V.
NÁZEV				TGN3, TGT3, TGH3	
Gearbox WSGQ080				Listů	List