Engineering motordata (WIN -100033)		
DC bus voltage	24	V DC
Nominal AC voltage	17	V AC (rms)
Rated voltage	12	V AC (rms)
Rated power	304	W
Rated speed	2000	rpm
Rated torque	1.45	Nm
Rated current	20.9	A (rms)
Peak torque	4.5	Nm
Peak current	66.49	A (rms)
Stall torque	1.5	Nm
Stall current	18.66	A (rms)
No load speed	3460	rpm
EMF constant ±10%	4.9	V AC (rms) / 1000rpm
Theoretical torque constant ±10%	0.08	Nm / A (rms)
Torque constant ±10% @ rated load	0.07	Nm / A (rms)
Number of poles	10	
Electrical time constant	1.39	ms
Winding terminal resistance	0.115	Ω
Rotary field terminal inductance	0.16	mH

Customs info	
HS Code	85015100

Mechanical motor data (setting 74)		
Max mechanical speed	12000	rpm
Mech. time constant	1.67	ms
Thermal time constant	23	min
Rotor inertia	0.55	kgcm²
Protection	IP64	
Color	RAL 9005	
Cooling	Convection	

Sensors	
Temperature	PT1000 {PT1000}
Feedback	AD36/1219Ax.xxBEx (Hengstler) multi-turn, 19+12 bits, BISS-C, 5V

Brake		
Braking torque	2.00	Nm
Voltage	24	V DC
Power @20°C	11.0	W
Current @20°C	0.46	A
Inertia	0.08	kgcm²
Mass	0.20	kg

Gearbox engineering data		
Gear ratio	20	
Efficiency*	94	%
Torsional stiffness	13.7	Nm/arcmin
Number of stages	2	
Rated output torque	38	Nm
Cycling output torque	77	Nm
Max output torque	103	Nm
Emergency output torque	150	Nm
Rated input speed	4200	rpm
Max input speed	10000	rpm
Operating temperature	<-40; 50>	°C
Max. backlash	< 2	arcmin
Service life	20000	h

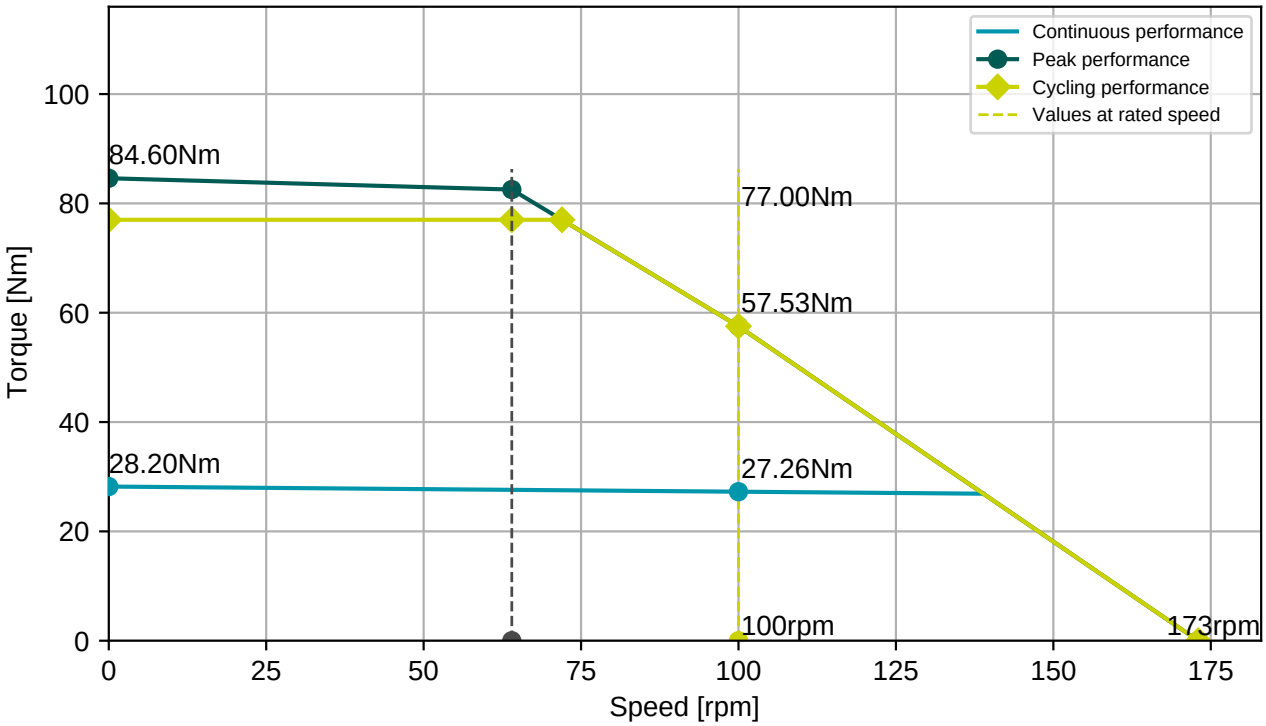
** at rated speed & torque*

Lubrication	
Type	Low temperature
Lubricant	Klübersynth GH 6-32

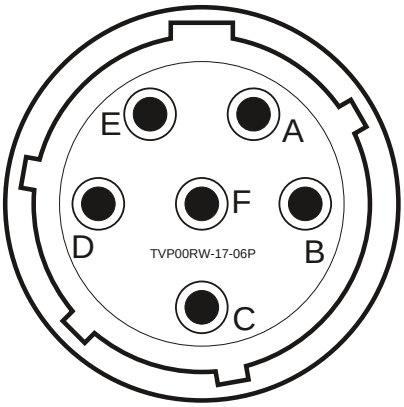
Gearbox mechanical data		
Radial force for 20'000h	2150	N
Axial force for 20'000h	2850	N
Output shaft design	Flange	
Mass	1.87	kg
Input inertia	0.228	kgcm²
Protection	IP65	

Actuator data		
Rated speed	100	rpm
Rated torque	27.26	Nm
Cycling torque	77.00	Nm
Peak torque	84.60	Nm
Emergency stop torque	90.00	Nm
EMF constant ±10%	98.0	V AC (rms) / 1000rpm
Torque constant ±10% @ rated load	1.30	Nm / A (rms)
Output inertia	311.2	kgcm²

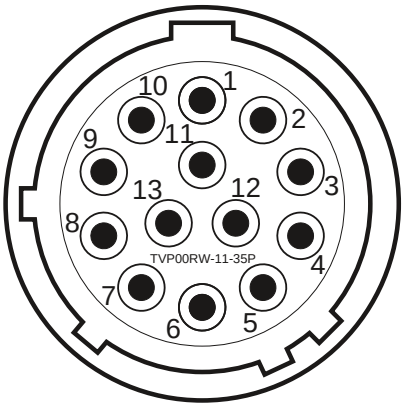
Torque / speed curve



TVP00RW-17-06P

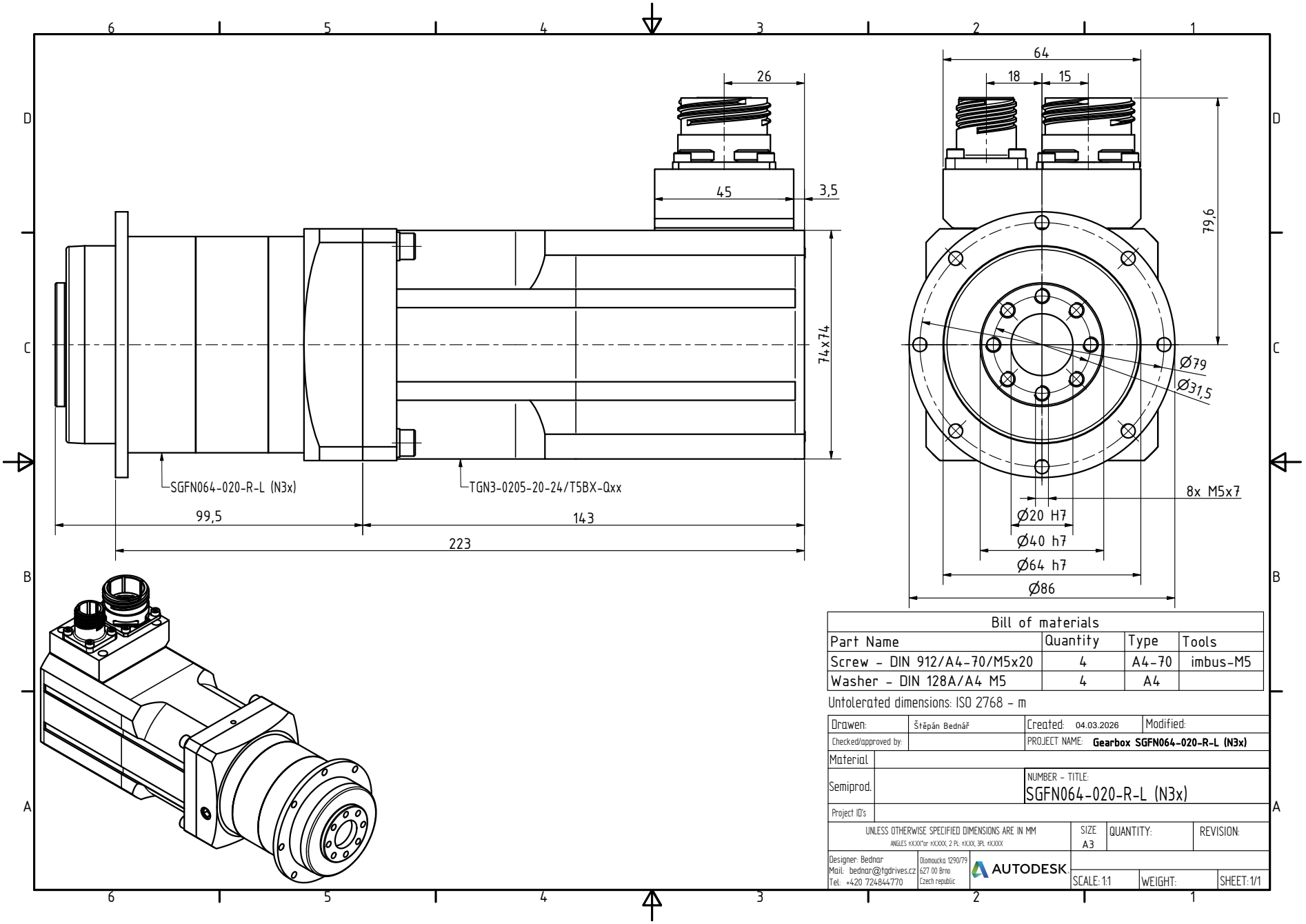


TVP00RW-11-35P



Connector 1 (202)	
A	U
B	V
C	W
D	PE
E	Bremse +
F	Bremse -

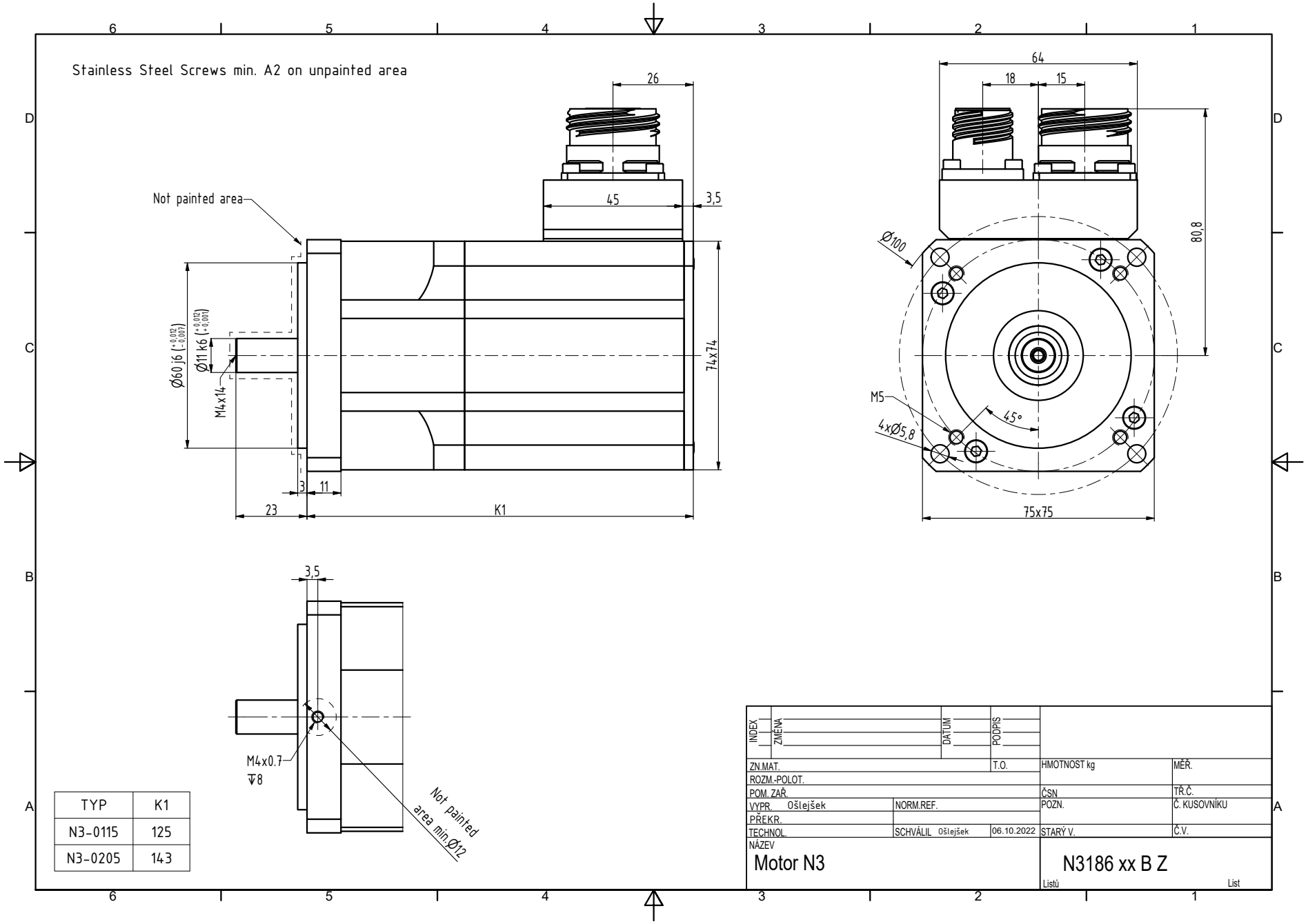
Connector 2 (520)	
1	Vcc
2	GND
3	DATA
4	DATA-
5	CLOCK
6	CLOCK-
7	Therm+
8	Therm-



Bill of materials			
Part Name	Quantity	Type	Tools
Screw - DIN 912/A4-70/M5x20	4	A4-70	imbus-M5
Washer - DIN 128A/A4 M5	4	A4	

Untolerated dimensions: ISO 2768 - m

Drawen:	Štěpán Bednář	Created: 04.03.2026	Modified:
Checked/approved by:		PROJECT NAME: **Gearbox SGFN064-020-R-L (N3x)**	
Material			
Semiprod.		NUMBER - TITLE: SGFN064-020-R-L (N3x)	
Project ID's			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM ANGLES ±XXX°or ±XXXX, 2 PL ±XXX, 3PL ±XXXX		SIZE A3 / QUANTITY:	REVISION:
Designer: Bednar Mail: bednar@tgdrives.cz Tel: +420 724844770	Olomoucka 1290/79 627 00 Brno Czech republic	AUTODESK	SCALE: 1:1 / WEIGHT: / SHEET: 1/1



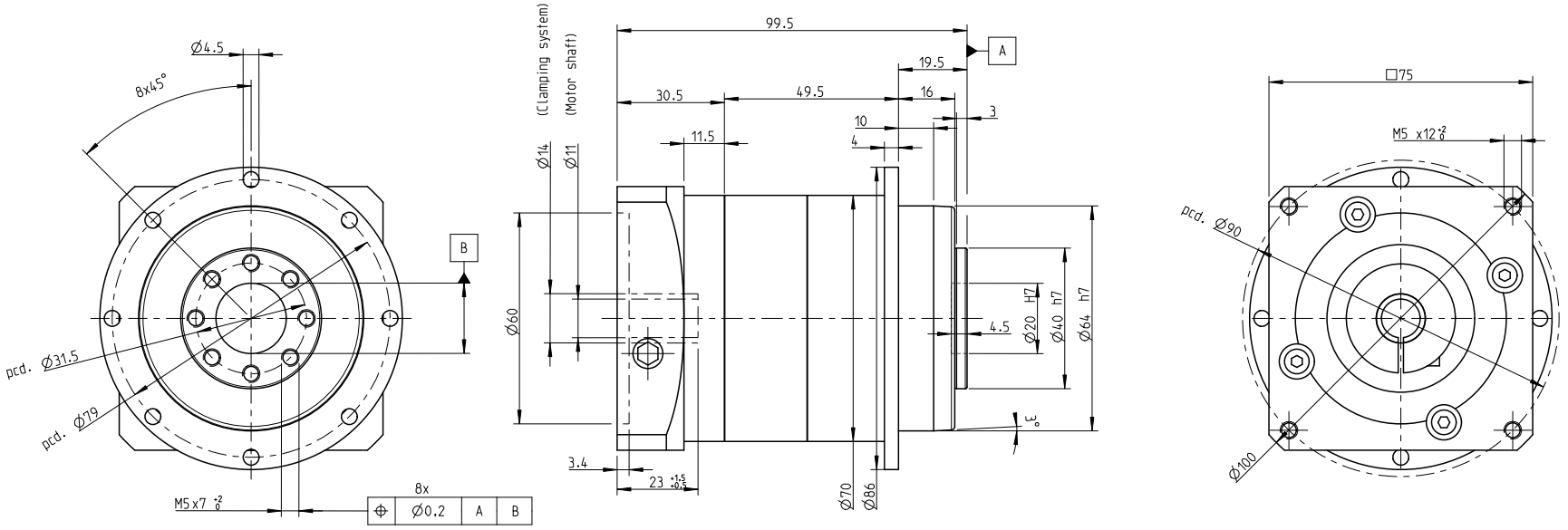
TYP	K1
N3-0115	125
N3-0205	143

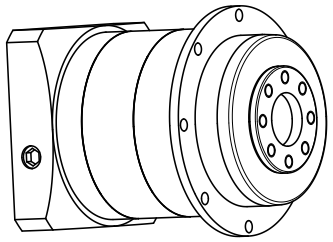
INDEX	ZMĚNA	DATUM	PODPIS		
ZN.MAT.			T.O.	HMOTNOST kg	MĚŘ.
ROZM.-POLOT.					
POM. ZAŘ.				ČSN	TŘ.Č.
VYPR. Ošlejšek		NORM.REF.		POZN.	Č. KUSOVNÍKU
PŘEKR.					
TECHNOL.		SCHVÁLIL Ošlejšek	06.10.2022	STARÝ V.	Č.V.

NÁZEV
Motor N3

N3186 xx B Z

Listů List





INDEX	ZMĚNA	DATUM	PODPIS		
ZM.MAT.		T.O.	HMOTNOST kg	MĚŘ.	
ROZM.-POLOT.					
ROZM. ZAŘ.			ČSN	TŘ.Č.	
VYPR.	NORM. REF.		POZN.	Č. KUSOVNÍKU	
PŘEKR.					
TECHNOL.	SCHVÁLIL.	12.9.2020	STARÝ V.	Č.V.	

NÁZEV

Gearbox SGFN064

TGN3, TGH3, TGT3

Listů List