V.05.00

Customer	:	**Behran Asanbar**		
Reference	:	**Selection HW134, 550Kg - 1 m/s (VVVF - 9HP)**		
Offer	N° :	**TEST**	**Date**	**08/06/2017**

TECHNICAL SECTION

PLANT

Position	↑
Roping	1:1
Balance	50 %
Duty load	550 Kg
Car weight	650 Kg
Counterweight	925 Kg
Shaft efficency	0,80
Car travel	15,0 m
Ropes compensation	0 %
Rope comp. weight	0,0 Kg
Ropes distance	700 mm
Car rated speed	1,00 m/s
Mass of tension device	0 Kg
Weight/m of traveling cable	0 Kg/m
Ropes strength class	1770 N/mm²

Plant data for Traction calculations according to EN81/1:1998

Øaverage defl.pulley carside	0 mm
Øaverage defl.pulley count.side	0 mm
Ø pulley for tension device	0 mm
Main defl.pulley (1=yes;0=no)	1
Pos.defl.pulley (1=car;0=count.)	0
Ø main defl. pulley	400 mm
N° defl.pulleys with simple defl.	0
N° defl.pulleys with reverse defl.	0
Friction in the shaft carside	0,0 N
Friction in the shaft count.side	0,0 N

Wrap angle calculation

Vert.dist.pulley axis	800 mm	
Wrap angle	169,5 °	OK !!

GEARBOX

Gearbox type	HW134
Traction sheave position	⊢T (L)
Ratio	42/1
Traction sheave diam.	550 mm
Ropes number	4
Ropes diameter	10
Groove type	Y
V-Angle	35 °
Undercut angle	105 °
Wrap angle	155 °
Pitch of grooves	17,0 mm
Undercut	7,93 mm
Tract. ropes weight	22,4 Kg

MOTOR

Drive system	VVVF
Poles	4
Power	6,1 kW
Drive system frequency	50 Hz
Motor nom.frequency	50 Hz
Voltage	380
St/h	240
RPM	1500
Power	9,0 Hp

FLYWHEEL TYPE

Flywheel type	134E
Stg.acceler.fl.up	
Stg.accel.fl.down	
Retardation fl.up	
Retardat.fl.down	
Torque of mech. brake	
Theor.lev.accuracy	
Total mom.of iner.	

GEARBOX SELECTION CHECK

Item	Required	Selected	Test
Car rated speed	1,00 m/s	1,03 m/s	+2,8%
Output torque	1.003 Nm	1.080 Nm	+7,7%
Static load	2.097 Kg	2.300 Kg	+9,7%
Grooves edges	min 2,0 mm	5,3 mm	OK !!
Tr.Sh. Sides	min 3,4 mm	4,1 mm	OK !!
Motor power	5,5 kW	6,1 kW	+10,2%
Ropes safety according to EN81/1:1985			
Safety factor	12,0	18,2	OK !!
Ropes safety according to EN81/1:1998			
Safety factor	14,4	18,2	OK !!
Traction and spec.press. according to EN81/1:1985			
$T_1/T_2 * c_1 * c_2$ (a) =	max 2,247	2,117	OK !!
$T_1/T_2 * c_1 * c_2$ (b) =	max 2,247	2,099	OK !!
Specific pressure	max 8,190	8,149	OK !!
Traction calculations according to EN81/1:1998			
Car loading condition			
Car empty low	1,919	1,376	OK !!
Car empty up	1,919	1,458	OK !!
Car full low	1,919	1,470	OK !!
Car full up	1,919	1,412	OK !!
Emergency braking condition (a=-0.5 m/s2)			
Car empty low in up direction	1,810	1,526	OK !!
Car empty up in up direction	1,810	1,617	OK !!
Car full low in down direction	1,810	1,465	OK !!
Car full up in down direction	1,810	1,404	OK !!
Stalled condition			
Car stalled low in low direction	6,045	39,289	OK !!
Car stalled up in low direction	6,045	397,358	OK !!
Count. stalled up in low dir.	6,045	282,161	OK !!
Count. stalled low in low dir.	6,045	27,624	OK !!

COMMERCIAL SECTION

OPTIONALS

Packing	Wooden box
Bed plate	
Brake electrom.voltage	200V
Rope guard	☑
Tropicalization	☐
Kit encoder	☐
Rope clamp	☐
Personal/customer Plate	☐
Special painting	☐

OFFER

MESSRS. Behran Asanbar

HEREBELOW PLEASE FIND SUMMARY OF TECHNICAL DATA AND OFFER :

- GEARBOX HW134 ; Traction sheave position (L) ; Ratio 42/1
  complete in delivery with syntethic oil and use&maintenance manual
- TRACTION SHEAVE Ø 550 mm ; 4 x ø10 ; Groove type Y ; V-Angle 35 ° ;
  Undercut angle 105 ° ;Undercut 7,93 mm ; Pitch of grooves 17 mm
- MOTOR ; Drive system VVVF ; 4 Poles ; 6,1 kWasy (9 Hp) ; 380 V ;
  50 Hz ; 240 St/h ;
- FLYWHEEL TYPE 134E
- BRAKE ELECTROMAGNET 200V
- PACKING Wooden box : HW134
- ROPE GUARD

Note / assumed data: The following data have been assumed for EN-81 calculation:
Considered traction sheave diameter 550mm, ropes 4x10mm, pitch of grooves 17mm
Cabin total weight 650kg, travel 15 mts, 50% lift balancing
Motor power : 6.1Kw (9Hp) - VVVF

NET UNIT PRICE

DELIVERY TERMS

PAYMENT CONDITIONS

NOTES :

We remain at your disposal for any information you may need, and awaiting your kind order confirmation.
Thanks & Best Regards,

GEM S.r.l.
Sales Dept.