

Customer	:	Behran Asanbar
Reference	:	Selection HW140C, 630Kg - 1 m/s (AC2 - 10HP)
Offer	N° :	TEST
	Date	13/01/2016

TECHNICAL SECTION

PLANT		GEARBOX		GEARBOX SELECTION CHECK			
Position	↑	Gearbox type	HW140C	Item	Required	Selected	Test
Roping	1:1	Traction sheave position	↑T (L)	Car rated speed	1,00 m/s	1,00 m/s	-0,0%
Balance	50 %	Ratio	44/1	Output torque	1.274 Nm	1.470 Nm	+15,4%
Duty load	630 Kg	Traction sheave diam.	560 mm	Static load	2.345 Kg	3.100 Kg	+32,2%
Car weight	700 Kg	Ropes number	5	Grooves edges	min 2,0 mm	5,3 mm	OK !!
Counterweight	1015 Kg	Ropes diameter	10	Tr.Sh. Sides	min 3,4 mm	8,1 mm	OK !!
Shaft efficiency	0,80	Groove type	Y	Motor power	5,7 kW	6,8 kW	+18,7%
Car travel	30,0 m	V-Angle	35 °	Ropes safety according to EN81/1:1985			
Ropes compensation	0 %	Undercut angle	105 °	Safety factor	12,0	20,0	OK !!
Rope comp. weight	0,0 Kg	Wrap angle	155 °	Ropes safety according to EN81/1:1998			
Ropes distance	700 mm	Pitch of grooves	17,0 mm	Safety factor	14,1	20,0	OK !!
Car rated speed	1,00 m/s	Undercut	7,93 mm	Traction and spec.press. according to EN81/1:1985			
Mass of tension device	0 Kg	Tract. ropes weight	56,0 Kg	T ₁ /T ₂ * c ₁ * c ₂ (a) =	max 2,247	2,098	OK !!
Weight/m of traveling cable	0 Kg/m	MOTOR		T ₁ /T ₂ * c ₁ * c ₂ (b) =	max 2,247	2,111	OK !!
Ropes strength class	1770 N/mm ²	Drive system	AC2	Specific pressure	max 8,251	7,259	OK !!
Plant data for				Traction calculations according to EN81/1:1998			
Ø average defl.pulley carside	0 mm	Poles	4/16	Car loading condition			
Ø average defl.pulley count.side	0 mm	Power	6,8 kW	Car empty low	1,919	1,343	OK !!
Ø pulley for tension device	0 mm	Drive system frequency	50 Hz	Car empty up	1,919	1,530	OK !!
Main defl.pulley (1=yes;0=no)	1	Motor nom.frequency	50 Hz	Car full low	1,919	1,521	OK !!
Pos.defl.pulley (1=car;0=count.)	0	Voltage	380/220	Car full up	1,919	1,389	OK !!
Ø main defl. pulley	400 mm	St/h	180	Emergency braking condition (a=0.5 m/s²)			
N° defl.pulleys with simple defl.	0	RPM	1500/375	Car empty low in up direction	1,817	1,489	OK !!
N° defl.pulleys with reverse defl.	0	Power	10,1 Hp	Car empty up in up direction	1,817	1,697	OK !!
Friction in the shaft carside	0,0 N	FLYWHEEL TYPE		Car full low in down direction	1,817	1,513	OK !!
Friction in the shaft count.side	0,0 N	Flywheel type	140A	Car full up in down direction	1,817	1,376	OK !!
Wrap angle calculation				Stalled condition			
Vert.dist.pulley axis	800 mm	Stg.accel.fl.up	0,68 m/s ² OK !!	Car stalled low in low direction	6,045	17,696	OK !!
Wrap angle	170,2 ° OK !!	Stg.accel.fl.down	1,02 m/s ² OK !!	Car stalled up in low direction	6,045	359,397	OK !!
		Retardation fl.up	0,81 m/s ² OK !!	Count. stalled up in low dir.	6,045	253,834	OK !!
		Retardat.fl.down	0,52 m/s ² OK !!	Count. stalled low in low dir.	6,045	12,212	OK !!
		Torque of mech. brake	92,54 Nm OK !!				
		Theor.lev.accuracy	±10,8 mm OK !!				
		Total mom.of iner.	0,76 Kgm ² OK !!				

COMMERCIAL SECTION

OPTIONALS	OFFER
Packing	MESSRS. Behran Asanbar
Bed plate	HEREBELOW PLEASE FIND SUMMARY OF TECHNICAL DATA AND OFFER :
Brake electrom.voltage	- GEARBOX HW140C ; Traction sheave position (L) ; Ratio 44/1
Rope guard	complete in delivery with syntethic oil and use&maintenance manual
Tropicalization	- TRACTION SHEAVE Ø 560 mm ; 5 x ø10 ; Groove type Y ; V-Angle 35 ° ;
Kit encoder	Undercut angle 105 ° ;Undercut 7,93 mm ; Pitch of grooves 17 mm
Rope clamp	- MOTOR ; Drive system AC2 ; 4/16 Poles ; 6,8 kWasy (10 Hp) ; 380/220 V ;
Personal/customer Plate	50 Hz ; 180 St/h ;
Special painting	- FLYWHEEL TYPE 140A
	- BRAKE ELECTROMAGNET 200V
	- PACKING Wooden box : HW140C
	- ROPE GUARD
	 Note / assumed data: The following data have been assumed for EN-81 calculation: Considered traction sheave diameter 560mm, ropes 5x10mm, pitch of grooves 17mm Cabin total weight 700kg, travel till 30 mts (10/11 stops), 50% lift balancing (if more than 11 stops, compensation for ropes weight is required) Motor power : 7.3Kwsyn (6.8Kw Asyn)
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	DELIVERY TERMS
	PAYMENT CONDITIONS
	NOTES :
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