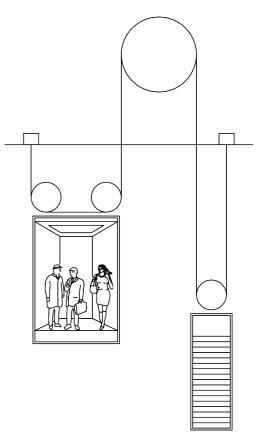




CHARACTERISTICS

PLANT			
Machine room position		Top	
Roping		1:2	
Compartment efficiency		0,87	
Winding type		CSW	
Expected plant efficiency		0,82	[]
Load	Q	800	[kg]
Car + door + operator weight	Р	950	[kg]
CWT balancing		50	[%]
CWT weight	CWT	1.350	[kg]
Cabin speed	Vc	1	[m/s]
Plant travel		30	[m]
Estimated ropes weight		48,6	[kg]
Ropes compensation		0	[%]
Estimated weight of the compensated ropes		0	[kg]
Estimated weight of the compensated ropes tension	oner	0	[kg]
Electric cables weight		24	[kg]
Recommended usage categories (VDI4707)		3	[]
Selected usage categories (VDI4707)		3	[]
Duty cycle		35	[%]
Wrapping angle	α	180	[°]
Diverting pulley supported on		Ball bearir	ngs
Average diameter of the guide pulleys		320	[mm]
Main diverting pulley side			
No. of total idler/deflection pulleys		3	[]
Ropes type	GUSTAV WOLF	PAWO 819 V CA298	W - 1770 -
Ropes resistance class			[N/mm²]
Rope minumum breaking load		46000	[N]
No. of diverting pulleys with reverse band		0	[]
Inertia of installation (full load)		21,25	[kgm²]
Inertia of installation (empty)		16,13	[kgm²]



The represented drawings is an indication

GEARLESS			
Machine model		SG3814	45BF
Auxiliary ventilation		Yes	
Traction sheave diameter (ø)		320	[mm]
Drive pulley width		125	[mm]
Hardened grooves		Yes	
Ropes	N	6	[]
Ropes diameter	d	8	[mm]
Groove profile type		VSI	
Gamma angle	γ	40	[°]
Beta angle	ß	0	[°]
Distance between grooves		12	[mm]
Brake manifacturer and type	MAYR RTW s	ize 350 ty	ype 8012
Brake torque	2	2 * 410	[Nm]
TUV certificates reference		EU-BD	845

MOTOR DATA	
Datadanaad	

[Nm]

476,5

Rated speed	120	[rpm]
Rated voltage	360	[V]
Rated frequency	20	[Hz]
Motor poles	20	

REGULATION DATA

Power required	6	[kW]
Typ. / Max Operating current	14,66 / 17,85	[A]
Start current at acceleration 0.3 / 0.7 [m/s ²]	17,11 / 20,38	[A]
Installation frequency	19,9	[Hz]
Installation speed	119,4	[rpm]
Start/hour	180	[avv/h]
Machine usage	97,59	[%]

RESCUE CONDITIONS

Calculated rated torque

Estimated system efficiency during emergency		0,90	[]
Min operating voltage at emergency speed	0,3 [m/s]	196	[V]
Max estimated torque during emergency		351,2	[Nm]
Short-circuit maximum torque		344	[Nm]
Speed at shortcircuit maximum torque		0,5	[m/s]

Notice: this document represents a pre-technical analysis of the machine dimensioning process on the basis of the data provided by the buyer C: 47298



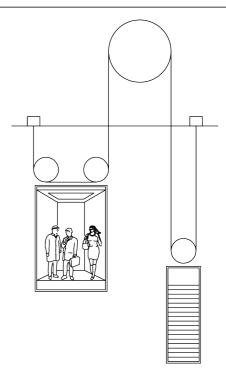


VERIFICATION EN 81-20-50

MACHINE VERIFICATION					
Max machine static load				34,34	[kN]
Calculated static load				15,8	[kN]
Verification	34,34	>	15,8	VERIF	IED
Maximum torque				678,6	[Nm]
Start torque at acceleration [m/s²]			0.3	556,2	[Nm]
Verification	678,6	>	556,2	VERIF	IED
Maximum short-circuit torque > Maximum estimated torque during emergency					RIF.
Maximum car speed during emergency <	= 0,3m/s			NOT VE	RIF.

ROPES SAFETY

Average bends Diameter		320	[mm]
Kp coefficient	Кр	1	[]
Equal Number	t	10	[]
Equal Number	р	2	[]
Equal Number		12	[]
Ratio between diameters	D / d	40	[]
Specific pressure	7,75 <= 6,83	(EN81.1:	1985)
Minimum safety coefficient admissible		19,96	[]
Calculated safety coefficient		31,28	[]
Verification	31,28 > 19,96	VERIF	IED



The represented drawings is an indication

FRICTION

Friction coefficient - car's load	μ	0,1	[]
Friction coefficient - emergency braking	μ	0,0839	[]
Friction coefficient - bound lift	μ	0,2	[]
Friction coefficient - car's load	f	0,2924	[]
Friction coefficient - emergency braking	f	0,2453	[]
Friction coefficient - bound lift	f	0,5848	[]
Max traction - car load	e^fa	2,51	[]
Max traction - emergency braking	e^fa	2,16	[]
Max traction - bound lift	e^fa	6,28	[]
COMPLETON HOAD LOAD OPERATIONS!			

CONDITION: "CAR LOAD OPERATIONS"

		. •				
Car	Cabin empty down		5136,6	Cabin full down		10041,5
side	Cabin empty up		4777,5	Cabin full up		9682,4
Curt	Cabin empty down		6621,7	Cabin full down		6621,8
Cwt	Cabin empty up		7098,5	Cabin full up		7098,6
T1 / T2	Cabin empty down	2,51 > 1,29	VERIFIED	Cabin full down	2,51 > 1,52	VERIFIED
11/12	Cabin empty up	2,51 > 1,49	VERIFIED	Cabin full up	2,51 > 1,36	VERIFIED
CONDI	TION: "EMERGENCY BRAKING	;"		Calculated deceleration [m/s²]		0,5
Car	Empty car at the bottom "UP"		4840	Full car at the bottom "DOWN"		9557
side	Empty car at the top "UP"		4523,8	Full car at the top "DOWN"		9155,1
Cwt	Empty car at the bottom "UP"		6964,4	Full car at the bottom "DOWN"		6279,1
CWI	Empty car at the top "UP"		7489,6	Full car at the top "DOWN"		6707,5
T1 / T2	Empty car at the bottom "UP"	2,16 > 1,44	VERIFIED	Full car at the bottom "DOWN"	2,16 > 1,52	VERIFIED
11/12	Empty car at the top "UP"	2,16 > 1,66	VERIFIED	Full car at the top "DOWN"	2,16 > 1,37	VERIFIED
CONDI	TION: "BLOCKED CAR"			-		
Car	Car at the bottom "DOWN"		476.8	Empty car at the bottom "UP"		5136.5

Car	Car at the bottom "DOWN"		476,8	Empty car at the bottom "UP"		5136,5
side	Car bound at the top "DOWN	٧"	0,1	Empty car at the top "UP"		4777,4
Curt	CWT at the top "UP" CWT at the top "UP"		6621,7	Bound CWT at the top "DOWN"		0,1
CWI	CWT at the top "UP"		7098,5	Bound CWT at the bottom "DOWN"		476,8
T1 / T2	Car at the bottom "DOWN"	6,28 < 13,89	VERIFIED	Bound cwt. at the top "DOWN"	6,28 < 102729,3	VERIFIED
11/12	Car bound at the top "DOW	6,28 < 141969,32	VERIFIED	Bound cwt. at the top "DOWN" Bound cwt. at the bottom "DOWN"	6,28 < 10,02	VERIFIED

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