



12 DESIGNATION

GEAR UNIT

W 63 L1 UF1 — 24 S2 — B3

OPTIONS

20

MOUNTING ARRANGEMENT

VF/VF, VF/W, W/WF	CW (1, 2, 3, 4) CCW (1, 2, 3, 4)
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15

MOUNTING POSITION

VF 27...VF 49 VFR 44, VFR 49	B3
W, WR VF 130...VF 250 VFR 130...VFR 250	B3 (default), B6, B7, B8, V5, V6
VF/VF VF/W W/WF	B3 (default), B6, B7, B8, V5, V6

24

MOTOR MOUNTING

B5	(VF 30...VF 250, VFR 49...VFR 250, W, WR)
B14	(VF 30...VF 49, W)

90
91

INPUT CONFIGURATION

	VF	VFR	W	WR	VF/VF	VF/W	W/WF
P(IEC)	 P27 (VF 27 only), P56...P225	 P63, P80...P160	 P71...P132	 P63...P112	 P56, P63, P90...P132	 P56...P80	 P71...P112
S_		 S44 (VFR 44 only)	 S1...S3				 S1...S3
HS							

90
91

91

165
168

GEAR RATIO

SHAFT BORE

W 75 VF/W 44/75	D30 (default), D28 (on request)
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VERSION

14

TORQUE LIMITER

VF, VFR W, WR	L1, L2	VF/VF	LF
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172

GEAR FRAME SIZE

VF	27, 30, 44, 49, 130, 150, 185, 210, 250	VF/VF	30/44, 30/49, 130/210, 130/250
VFR	44, 49, 130, 150, 185, 210, 250	VF/W	30/63, 44/75, 44/86, 49/110
W, WR	63, 75, 86, 110	W/WF	63/130, 86/150, 86/185

GEAR TYP

VF, W	Worm gearbox
VFR, WR	Helical-worm gear unit
VF/VF, VF/W, W/WF	Combined gearbox



10 VERSIONS

VF		VF	
		N VF 27 ... VF 250 Foot mounted, underdriven	
		A VF 27 ... VF 250 Foot mounted, overdriven	U W 63 ... W 110 Universal gear case
		V VF 27 ... VF 250 Foot mounted, wormshaft vertical	
		F VF 27 ... VF 185 Standard flange	
		FA VF 44 ... VF 49 Extended output flange	UF W 63 ... W 110 Standard mounting flange
		FC VF 130 ... VF 185 Short flange	
		FR VF 130 ... VF 185 Short flange and reinforced bearings	
		P VF 30 ... VF 250 Side cover for shaft mounting	UFC W 63 ... W 110 Mounting flange reduced in length
		P1 = P2 VF 30 ... VF 49 VF 210, VF 250	UFCR W 75 Mounting flange reduced in length and diameter
		U VF 30 ... VF 49 Foot mount	



W 110 - WR 110

830 Nm

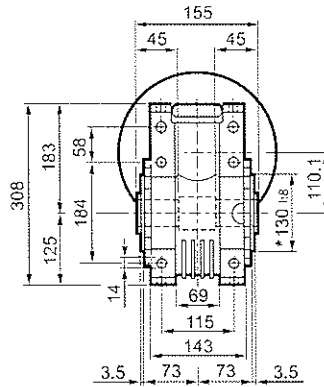
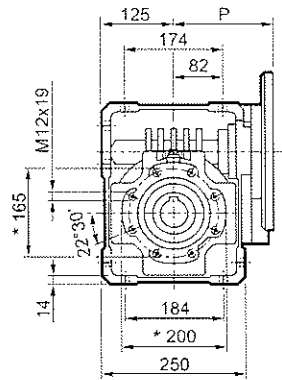
			i	η_s %	$n_1 = 2800 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$							
					n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	η_d %	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N		R_{n2} N	η_d %
W 110	W 110_7	7	71	400	445	20.7	1200	3710	90	200	500	11.8	1200	5020	89	166	
	W 110_10	10	67	280	490	16.1	1200	4650	89	140	550	9.3	1200	6190	87		
	W 110_15	15	60	187	535	12.0	1200	5770	87	93	600	7.0	1200	7590	84		
	W 110_20	20	61	140	510	8.7	1200	6790	86	70	570	5.0	1200	8000	84		
	W 110_23	23	59	122	480	7.1	1200	7430	86	61	540	4.1	1200	8000	83		
	W 110_30	30	45	93	625	7.5	1200	7780	81	47	700	4.4	1200	8000	77		
	W 110_40	40	46	70	595	5.5	1200	8000	80	35	670	3.2	1200	8000	76		
	W 110_46	46	44	61	535	4.3	1200	8000	79	30	600	2.6	1200	8000	74		
	W 110_56	56	41	50	535	3.7	1200	8000	76	25.0	600	2.2	1200	8000	72		
	W 110_64	64	38	44	470	2.9	1200	8000	74	21.9	530	1.7	1200	8000	70		
W 110_80	80	34	35	420	2.2	1200	8000	71	17.5	470	1.3	1200	8000	66			
W 110_100	100	30	28.0	410	1.8	1200	8000	67	14.0	460	1.1	1200	8000	62			
					$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$							
W 110	W 110_7	7	71	129	540	8.3	1200	6040	88	71	595	5.2	1200	7680	86	166	
	W 110_10	10	67	90	590	6.5	1200	7410	86	50	655	4.1	1200	8000	84		
	W 110_15	15	60	60	645	4.9	1200	8000	83	33	710	3.1	1200	8000	80		
	W 110_20	20	61	45	615	3.5	1200	8000	82	25.0	675	2.2	1200	8000	79		
	W 110_23	23	59	39	580	2.9	1200	8000	81	21.7	640	1.9	1200	8000	77		
	W 110_30	30	45	30	755	3.2	1200	8000	74	16.7	830	2.1	1200	8000	70		
	W 110_40	40	46	22.5	720	2.3	1200	8000	73	12.5	795	1.5	1200	8000	68		
	W 110_46	46	44	19.6	645	1.9	1200	8000	71	10.9	710	1.2	1200	8000	66		
	W 110_56	56	41	16.1	645	1.6	1200	8000	68	8.9	710	1.1	1200	8000	63		
	W 110_64	64	38	14.1	570	1.3	1200	8000	65	7.8	630	0.86	1200	8000	60		
W 110_80	80	34	11.3	505	0.98	1200	8000	61	6.3	560	0.65	1200	8000	56			
W 110_100	100	30	9.0	495	0.82	1200	8000	57	5.0	545	0.56	1200	8000	51			

1000 Nm

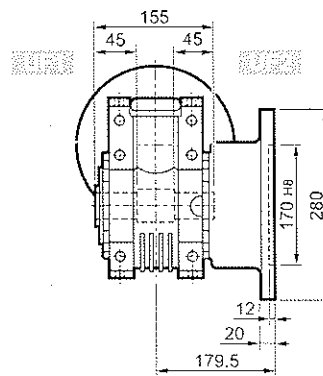
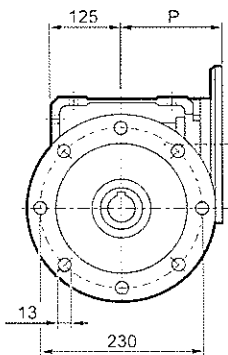
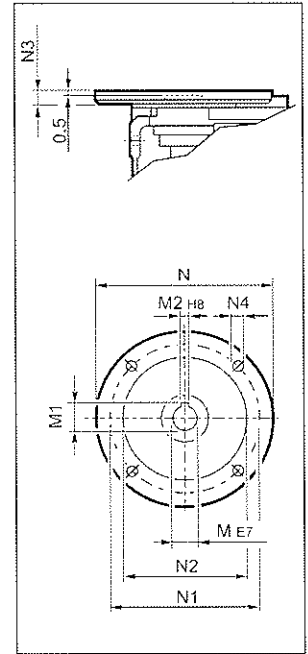
			i	η_s %	$n_1 = 2800 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$							
					n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	η_d %	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N		R_{n2} N	η_d %
WR 110	WR 110_21	21	70	133	540	8.6	700	5930	88	67	595	4.8	700	7950	86	167	
	WR 110_30	30	66	93	590	6.7	700	7280	86	47	655	3.8	700	8000	84		
	WR 110_45	45	59	62	645	5.1	700	8000	83	31	710	2.9	700	8000	80		
	WR 110_60	60	60	47	615	3.7	700	8000	82	23.3	675	2.1	700	8000	79		
	WR 110_69	69	58	41	580	3.0	700	8000	81	20.3	640	1.8	700	8000	77		
	WR 110_90	90	44	31	755	3.3	700	8000	74	15.6	830	1.9	700	8000	70		
	WR 110_120	120	45	23.3	720	2.4	700	8000	73	11.7	795	1.4	700	8000	68		
	WR 110_138	138	43	20.3	645	1.9	700	8000	71	10.1	710	1.1	700	8000	66		
	WR 110_168	168	40	16.7	645	1.7	700	8000	68	8.3	710	0.98	700	8000	63		
	WR 110_192	192	37	14.6	570	1.3	700	8000	65	7.3	630	0.80	700	8000	60		
WR 110_240	240	33	11.7	505	1.0	700	8000	61	5.8	560	0.61	700	8000	56			
WR 110_300	300	29	9.3	495	0.85	700	8000	57	4.7	545	0.52	700	8000	51			
					$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$							
WR 110	WR 110_21	21	70	43	645	3.4	700	8000	84	23.8	715	2.2	700	8000	82	167	
	WR 110_30	30	66	30	710	2.8	700	8000	81	16.7	785	1.7	700	8000	79		
	WR 110_45	45	59	20.0	870	2.4	700	8000	77	11.1	950	1.5	700	8000	75		
	WR 110_60	60	60	15.0	800	1.6	700	8000	77	8.3	850	1.0	700	8000	74		
	WR 110_69	69	58	13.0	750	1.4	700	8000	75	7.2	820	0.86	700	8000	72		
	WR 110_90	90	44	10.0	900	1.4	700	8000	66	5.6	1000	0.94	700	8000	62		
	WR 110_120	120	45	7.5	870	1.1	700	8000	65	4.2	950	0.68	700	8000	61		
	WR 110_138	138	43	6.5	800	0.87	700	8000	63	3.6	900	0.58	700	8000	59		
	WR 110_168	168	40	5.4	775	0.72	700	8000	60	3.0	800	0.45	700	8000	55		
	WR 110_192	192	37	4.7	685	0.59	700	8000	57	2.6	720	0.37	700	8000	53		
WR 110_240	240	33	3.8	590	0.44	700	8000	53	2.1	620	0.28	700	8000	48			
WR 110_300	300	29	3.0	570	0.37	700	8000	48	1.7	600	0.24	700	8000	44			



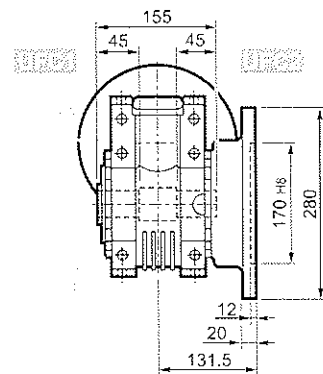
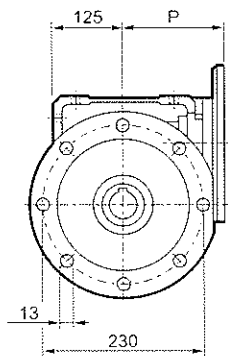
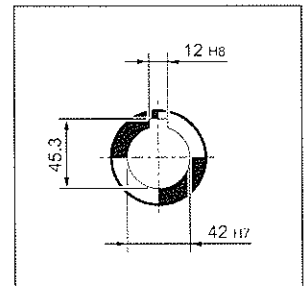
W 110...P (IEC)



INPUT



OUTPUT



		M	M1	M2	N	N1	N2	N3	N4	P	
W 110	P80 B5	19	21.8	6	200	165	130	—	M10x12	143	28
W 110	P90 B5	24	27.3	8	200	165	130	—	M10x12	143	28
W 110	P100 B5	28	31.3	8	250	215	180	13	13	151	29
W 110	P112 B5	28	31.3	8	250	215	180	13	13	151	29
W 110	P132 B5	38	41.3	10	300	265	230	16	14	226	31
W 110	P80 B14	19	21.8	6	120	100	80	7.5	7	143	27.5
W 110	P90 B14	24	27.3	8	140	115	95	6.5	9	143	27.5
W 110	P100 B14	28	31.3	8	160	130	110	13	9	151	27
W 110	P112 B14	28	31.3	8	160	130	110	13	9	151	27

* On both sides