

General data

Motor type	13.71□.35.□.2.0	13.71□.□□.□.□.□	13.75□.□□.□.□.□
Enclosure	IP54 or IP 55		
Thermal class (VDE530)	F		
Motor protection	-	Thermal contact (normally-closed contact)	
Cooling	Naturally ventilated		Integral fan
Temperature range	-20 to +40 °C		
Site altitude	Up to 1000 m a.m.s.l.		
Electrical connection	Terminal box		
Bearing	Deep-groove ball bearing		
Operating mode (VDE530)	S1		

Description

The multi-range windings make three-phase asynchronous motors suitable for operation in a wide range of operating

voltages – 3-phase 220-240/380-415 V. The lower voltage applies to delta connections and the higher to star connections.



Three-phase asynchronous motor type: 13.710 (smooth housing)



Three-phase asynchronous motor type: 13.750 (ribbed housing)

Operation with frequency inverters for AC motors

The sticker in the terminal box indicates the voltage limit values for your motor.

Permissible voltage
 $\hat{u} \leq 0.75 \text{ kV}$
 $dU/dt \leq 5 \text{ kV } \mu\text{s}$

Sticker for product range 13.7□□

Protecting the motor from excessive voltage spikes

- ▶ When operating the motor with a frequency inverter or for mains switching operation, voltage spikes can occur which can damage the motor insulation.
- ▶ To prevent malfunctions, the limit values given in the tables must not be exceeded:

Operating the motor with	Limit values for voltage spikes	
	Max. amplitude $\hat{u}$ (kV)	Max. rate of rise dU/dt (kV / μs)
Frequency inverter single-phase	0.75	5
Frequency inverter three-phase	1.5	
Mains switching operation	0.75	

TIP!

For mains switching operation, the voltage spikes can be limited by the use of a suppressor circuit with RC components or varistors (not part of scope of supply). The suppressor circuit must be of a suitable dimension for the application in question!

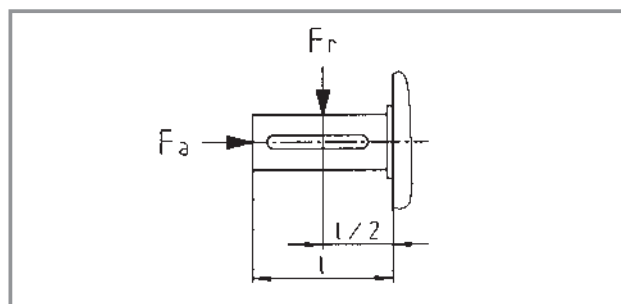


Rated data

Motor type (smooth housing)	13.710.35	13.710.35	13.710.47	13.710.47	13.710.55	13.710.55
Rated power (W)	12	25	40	75	60	90
Rated torque (Nm)	0.085	0.088	0.28	0.27	0.42	0.32
Rated current (A)	0.18 / 0.1	0.35 / 0.2	0.38 / 0.22	0.40 / 0.23	0.37 / 0.21	0.44 / 0.25
Rated voltage (V)	230/400	230/400	230/400	230/400	230/400	230/400
Rated frequency (Hz)	50	50	50	50	50	50
Rated speed (rpm)	1350	2700	1350	2700	1350	2700
Power factor	0.7	0.53	0.61	0.76	0.72	0.86
Moment of inertia (kgcm ²)	0.22	0.22	0.41	0.41	1.4	0.85
Max. radial force (N) F_r	240	190	350	280	340	270
Max. axial force (N) F_a	230	170	320	240	320	240
M_A/M_N	2.6	2.6	2.2	2.4	1.9	2.1
M_K/M_N	2.0	2.0	2.5	2.0	1.8	2.1

Motor type (ribbed housing)	13.750.45	13.750.45	13.750.55	13.750.55	13.750.65	13.750.65
Rated power (W)	30	60	90	150	180	250
Rated torque (Nm)	0.21	0.21	0.64	0.53	1.27	0.86
Rated current (A)	0.42 / 0.24	0.48 / 0.28	0.70 / 0.40	0.73 / 0.42	1.20 / 0.70	1.27 / 0.73
Rated voltage (V)	230/400	230/400	230/400	230/400	230/400	230/400
Rated frequency (Hz)	50	50	50	50	50	50
Rated speed (rpm)	1350	2700	1350	2700	1350	2750
Power factor	0.56	0.62	0.65	0.86	0.79	0.83
Moment of inertia (kgcm ²)	0.31	0.31	1.3	0.79	2.1	1.4
Max. radial force (N) F_r	240	190	400	320	570	450
Max. axial force (N) F_a	120	90	380	280	520	390
M_A/M_N	2.8	3.3	2.1	2.3	1.7	2.7
M_K/M_N	2.0	2.9	1.9	2.6	2.0	2.0

The motors are dimensioned for a rated frequency of 50 Hz. The rated frequency of 60 Hz is permissible. If the same rated voltage is maintained with 60 Hz operation the utilisation of the motor and thus the motor temperature reduce. If the rated voltage is increased by the factor 1.2 (ratio 60 Hz/50 Hz) in 60 Hz operation, the motor utilisation remains constant and the temperatures are the same as in 50 Hz operation.



Frequency	Voltage	Power	Speed	Torque	Starting torque
Hz	U/U _N in %	P/P _N in %	n/n _N in %	M/M _N in %	M _A /M _{AN} in %
50	100	100	100	100	100
60	100	100	120	83	70
60	120	120	120	100	100



Drive selection

AC asynchronous motors (smooth housing)

Selection table Type 13.710.□□.□.2.□

Motor type	P _N W rpm	50 Hz		Design A-side	Selection (tick as required)
		n ₂ Nm	M ₂		
13.710.35.0.2.0	12	1350	0.09	B14	
13.710.35.0.2.0	25	2700	0.09	B14	
13.710.47.0.2.□	40	1350	0.28	B14	
13.710.47.0.2.□	75	2700	0.27	B14	
13.710.55.1.2.□	60	1350	0.42	IEC56 B14 C80	
13.710.55.1.2.□	90	2700	0.32	IEC56 B14 C80	

Additional order information

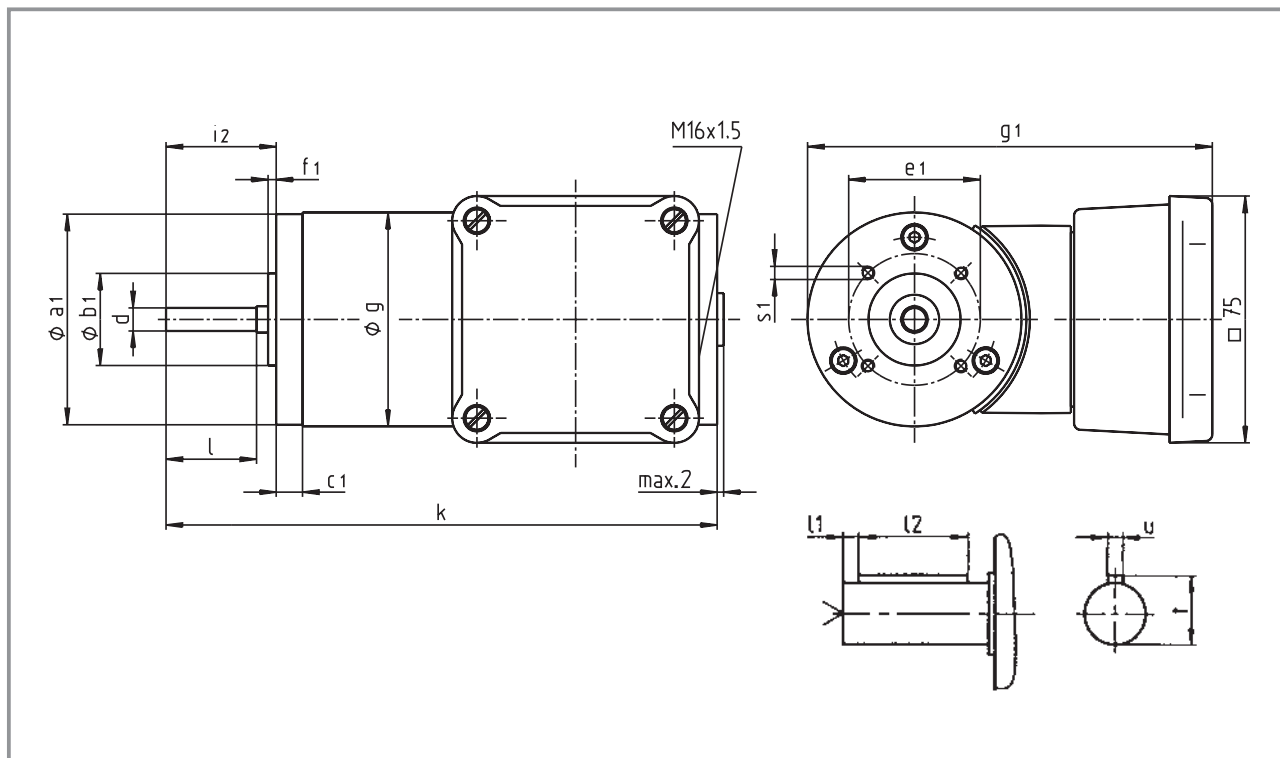
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Enclosure	IP54	
	IP55	
Brake supply voltage	24 V DC with motor frame size 47 and 55 only	
	230 V AC with bridge rectifier with motor frame size 47 and 55 only	
Position of electrical connection		2

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type 13.710.□□.□.2.□



Motor type	Frame size	a_1	b_1 j7	c_1	d	e_1	f_1	g	g_1	i_2	k	l	l_1	l_2	s_1	t	u	Weight approx. kg
13.710.35.0.2.0		64	28	10	7 h6	40	2.5	65	123	33.5	167.5	31	—	—	M4	—	—	1.8
13.710.47.0.2.□		74	28	10	8 h6	45	2.5	75	133	32.5	186.5	29	—	—	M4	—	—	2.9
13.710.55.1.2.□	IEC 56	85	50	14	9 k6	65	2.5	85	144	20	183	20	3	14	M5	10.2	3	3.6

Dimensions in mm



Drive selection

AC asynchronous motors (ribbed housing)

Selection table Type 13.750.□□.□.□.□

Motor type	P _N W rpm	50 Hz		Design A-side	Selection (tick as required)
		n ₂ Nm	M ₂		
13.750.45.0.3.□	30	1350	0.21	B3	
13.750.45.0.2.□				B14	
13.750.45.0.3.□	60	2700	0.21	B3	
13.750.45.0.2.□				B14	
13.750.55.1.3.□	90	1350	0.64	IEC56 B3	
13.750.55.1.2.□				IEC56 B14 C80	
13.750.55.1.3.□	150	2700	0.53	IEC56 B3	
13.750.55.1.2.□				IEC56 B14 C80	
13.750.65.1.3.□	180	1350	1.27	IEC63 B3	
13.750.65.1.2.□				IEC63 B14 C90	
13.750.65.1.3.□	250	2750	0.86	IEC63 B3	
13.750.65.1.2.□				IEC63 B14 C90	

Additional order information

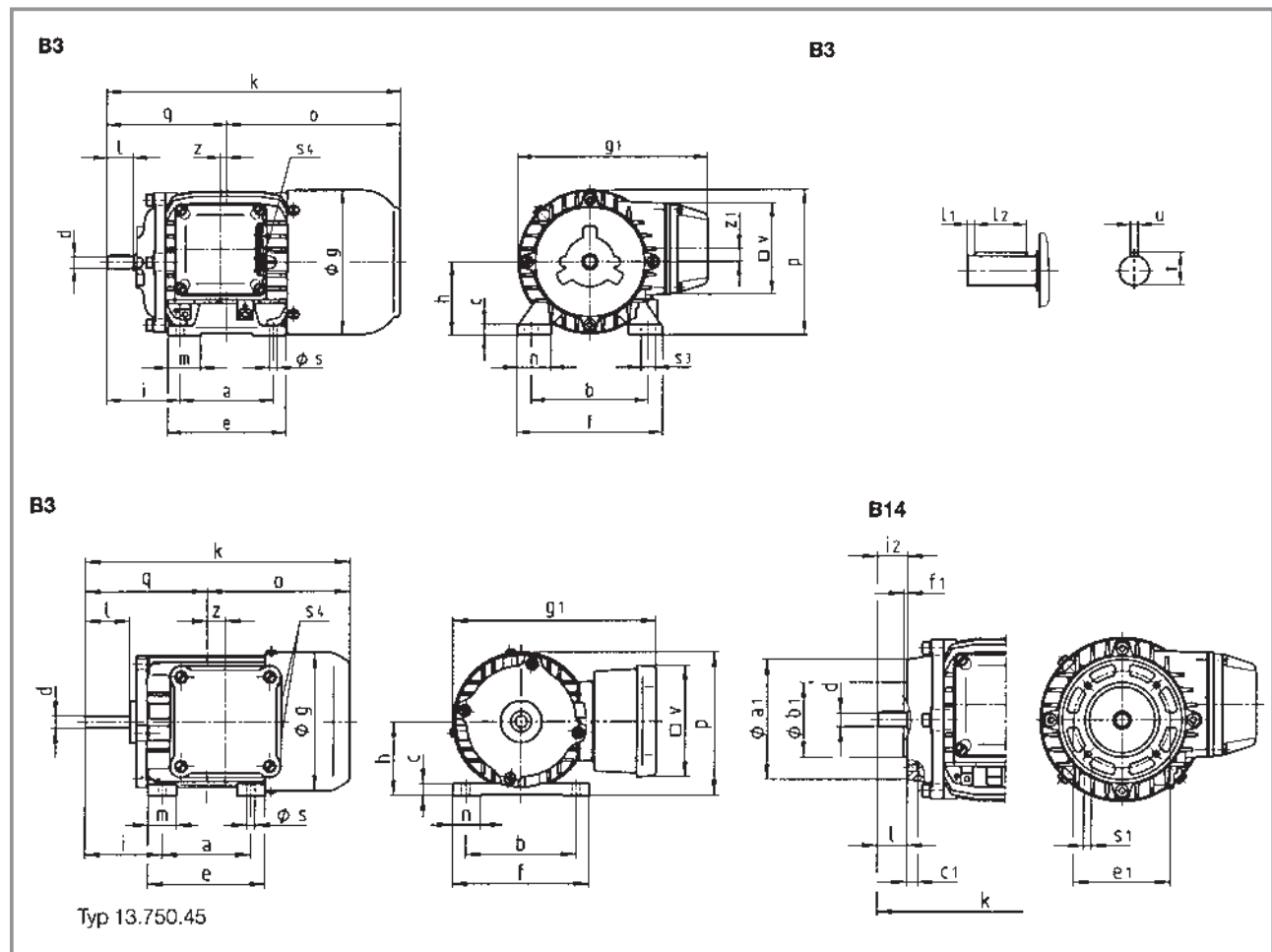
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Enclosure	IP54	
	IP55	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Position of electrical connection on type B3		2 3 5
Position of electrical connection on type B14		2

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type 13.750.□□.□.□.□



Motor type	Frame size	a B3	a ₁ B14	b B3	b ₁ B14 j7	c B3	c ₁ B14	d	e B3	e ₁ B14	f B3	f ₁ B14	g	g ₁	h B3	i B3	i ₂ B14
13.750.45.0.□.□	—	60	74.5	75	28	8	7	8 h6	79	45	93	4.5	93	137.5	50	52	32.5 34.5
13.750.55.1.□.□	IEC 56	71	80	90	50	8	7.5	9 k6	90	65	112	2.5	110.5	146	56	56	20
13.750.65.1.□.□	IEC 63	80	90	100	60	9.5	8	11 k6	105	75	125	2.5 3	123	158	63	63	23

Motor type	k	l *)	l ₁	l ₂	m B3	n B3	o	p B3	p ₁ B3	q	s B3	s ₁ B14	s ₃ B3	s ₄	t	u	v	z	z ₁	Weight approx. kg
13.750.45.0.□.□	178.5	30			19	19	96.5	96.5	141	82	5.5	M5	—	M16x1.5	—	—	75	13.5	—	2.3
13.750.55.1.□.□	187	20	2.5	15	25	26	95.5	111.5	146.5	91.5	6	M5	11	M16x1.5	10.2	3	70	5	10	3.7
13.750.65.1.□.□	215.5	23	3	18	27.5	30	112.5	124.5	165.5	103	7	M5	12	M16x1.5	12.5	4	70	8.5	16	5

*) Motors, if non-IEC motors, do not have a shaft collar

Dimensions in mm



Drive selection

AC asynchronous motors (smooth housing)

Selection table Type 13.71□.□□.□.2.□

Motor type	P _N	50 Hz		Design A-side for gearbox attachment	Selection (tick as required)
	W	n ₂ rpm	M ₂ Nm		
13.710.35.9.2.0	12	1350	0.085	B14 for SPL42	
13.710.35.9.2.0	25	2700	0.088	B14 for SPL42	
13.711.35.2.2.0	12	1350	0.085	B14 for SSN25	
13.711.35.2.2.0	25	2700	0.088	B14 for SSN25	
13.711.47.0.2.0	40	1350	0.280	B14 for SSN25	
13.711.47.0.2.0	75	2700	0.270	B14 for SSN25	
13.711.55.3.2.0	60	1350	0.420	B14 for SSN31	
13.711.55.3.2.0	90	2700	0.320	B14 for SSN31	

Additional order information

B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Enclosure	IP54	
	IP55	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Position of electrical connection		2

Dimensional drawing available on request

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Selection table Type 13.751.□□.□.□.□

Motor type	P _N	50 Hz		Design A-side for gearbox attachment	Selection (tick as required)
	W	n ₂ rpm	M ₂ Nm		
13.751.45.2.5.□	30	1350	0.21	B3/B14 for SSN25	
13.751.45.2.2.□				B14 for SSN25	
13.751.45.2.5.□	60	2700	0.21	B3B14 for SSN25	
13.751.45.2.2.□				B14 for SSN25	
13.751.55.3.5.□	90	1350	0.64	B3/B14 for SSN31	
13.750.55.1.2.□				B14 for SSN31	
13.751.55.3.5.□	150	2700	0.53	B3/B14 for SSN31	
13.751.55.3.2.□				B14 for SSN31	
13.751.65.5.5.□	180	1350	1.27	B3/B14 for SSN40	
13.751.65.5.2.□				B14 for SSN40	
13.751.65.5.5.□	250	2750	0.86	B3/B14 for SSN40	
13.751.65.5.2.□				B14 for SSN40	

Additional order information

B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Enclosure	IP54	
	IP55	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Position of electrical connection on type B3/B14		2 3 5
Position of electrical connection on type B14		2

Dimensional drawing available on request

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Drive selection

AC worm geared motors (smooth housing)

Selection table Type SSN25-1UVCL-035C2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.711.35.2.2.0	12	270	0.30	20.33	5	
		169	0.50	14.51	8	
		135	0.60	13.07	10	
		90	0.80	9.19	15	
		68	1.00	8.11	20	
		45	1.20	6.13	30	
		34	1.50	4.79	40	
		27	1.50	3.92	50	
		23	1.70	3.33	60	
13.711.35.2.2.0	25	540	0.40	19.64	5	
		338	0.50	14.02	8	
		270	0.60	12.63	10	
		180	0.80	8.88	15	
		135	1.00	7.84	20	
		90	1.30	5.92	30	
		68	1.50	4.62	40	
		54	1.60	3.79	50	
		45	1.80	3.21	60	

Additional order information

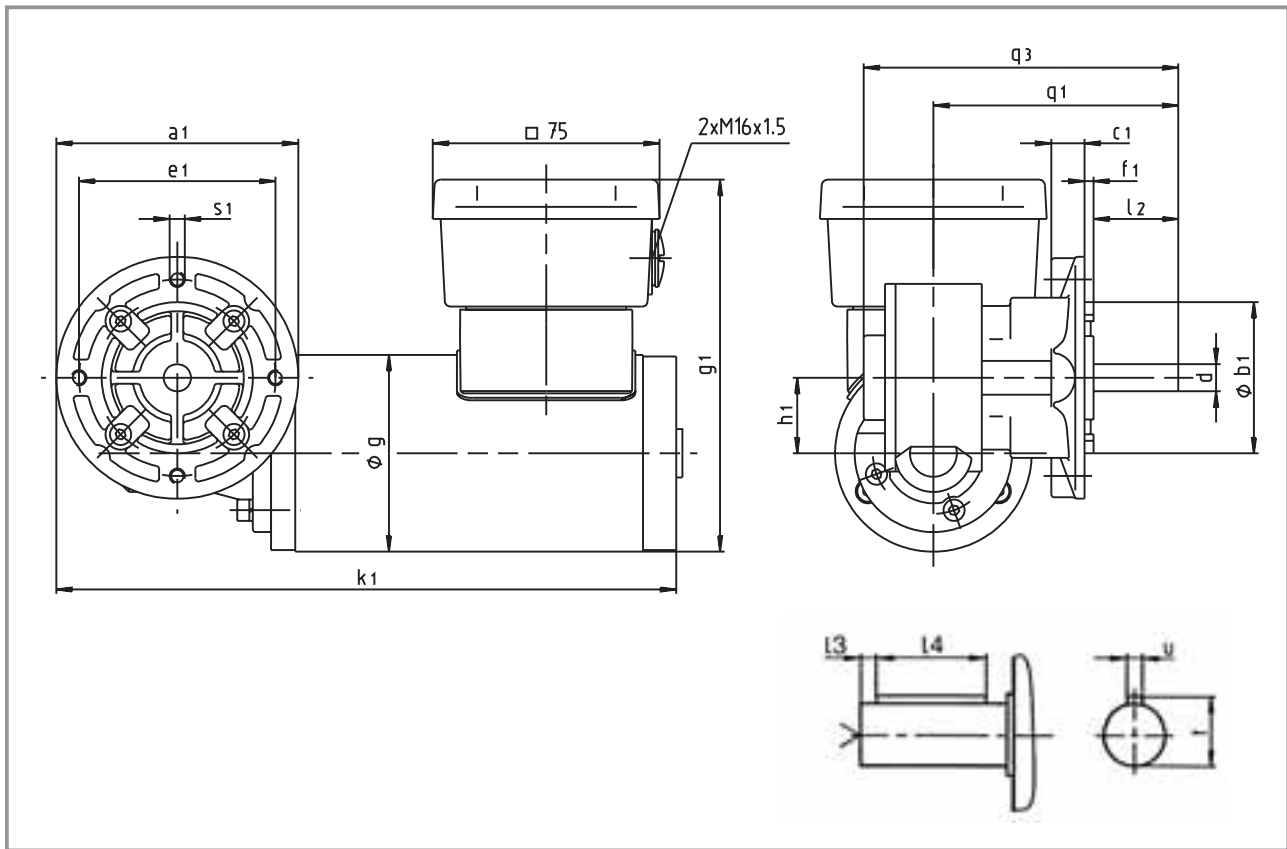
Enclosure	IP54	
	IP55	
Gearbox type	VCL	
Flange/shaft position		3 5
Mounting position		A B C D E F
Position of electrical connection		2 3 4 5

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SSN25-1UVCL-035C2□



Geared motor	a_1 ϕ	b_1 $j7$	c_1	d $h6$	e_1	f_1	g	g_1	h_1	k_1	l_2	l_3	l_4	q_1	q_3	s_1	t	u	Weight approx. kg
SSN25-1UVCL-035C2□	80	50	8	9	65	3	65	123	25	205	28	3	20	81	104	M5	10.2	3	2.35

Dimensions in mm



Drive selection

AC worm geared motors (smooth housing)

Selection table Type SSN25-1UVCL-047C2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.711.47.2.2.□	40	270	1.10	6.17	5	
		169	1.70	4.41	8	
		135	2.00	3.97	10	
		90	2.70	2.79	15	
		68	3.30	2.46	20	
		45	4.10	1.86	30	
		34	4.90	1.45	40	
		27	5.10	1.19	50	
		23	5.60	1.00	60	
13.711.47.2.2.□	75	540	1.10	6.40	5	
		338	1.60	4.57	8	
		270	1.90	4.12	10	
		180	2.50	2.89	15	
		135	3.10	2.55	20	
		90	3.80	1.93	30	
		68	4.60	1.51	40	
		54	4.80	1.23	50	
		45	5.30	1.05	60	

Additional order information

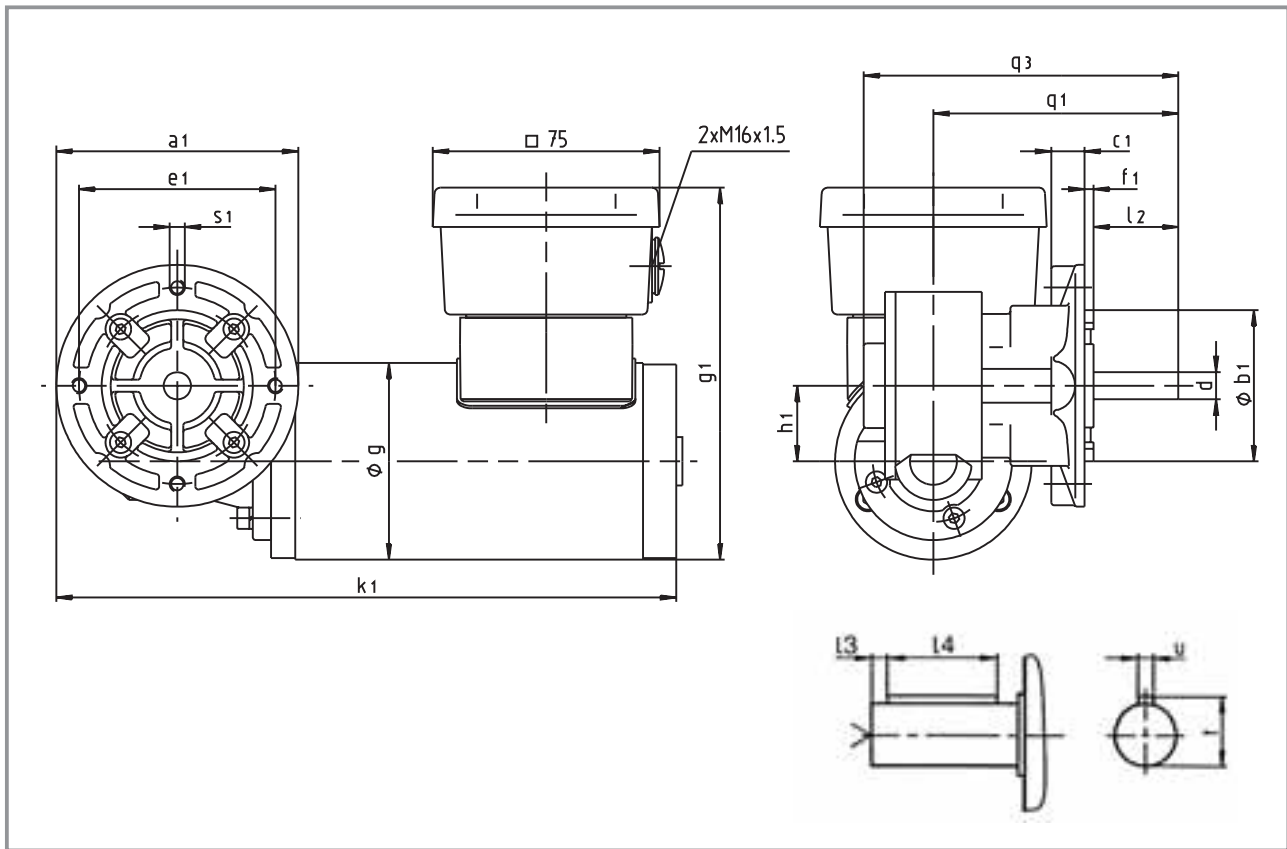
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Enclosure	IP54	
	IP55	
Gearbox type	VCL	
Flange/shaft position		3 5
Mounting position		A B C D E F
Position of electrical connection		2 3 4 5

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SSN25-1UVCL-047C2□



Geared motor	a_1 ϕ	b_1 $j7$	c_1	d $h6$	e_1	f_1	g	g_1	h_1	k_1	l_2	l_3	l_4	q_1	q_3	s_1	t	u	Weight approx. kg
SSN25-1UVCL-047C2□	80	50	8	9	65	3	75	133	25	225	28	3	20	81	104	M5	10.2	3	3.45

Dimensions in mm

Drive selection

AC worm geared motors (smooth housing)

Selection table Type SSN31-1U□□□-056C2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.711.55.3.2.□	60	270	1.79	7.84	5	
		192	2.44	5.74	7	
		135	3.23	4.33	10	
		90	4.66	3.43	15	
		68	5.80	2.59	20	
		54	6.41	2.19	25	
		45	7.43	2.02	30	
		35	9.10	1.76	38	
		27	9.66	1.35	50	
		24	12.01	1.25	55	
		18	11.00	0.97	75	
		14	11.00	0.69	100	
13.711.55.3.2.□	90	540	1.36	10.29	5	
		385	1.86	7.53	7	
		270	2.46	5.68	10	
		180	3.55	4.50	15	
		135	4.42	3.40	20	
		108	4.88	2.87	25	
		90	5.66	2.65	30	
		71	6.93	2.31	38	
		54	7.36	1.77	50	
		49	9.15	1.64	55	
		36	8.64	1.27	75	
		27	11.00	0.90	100	

Additional order information

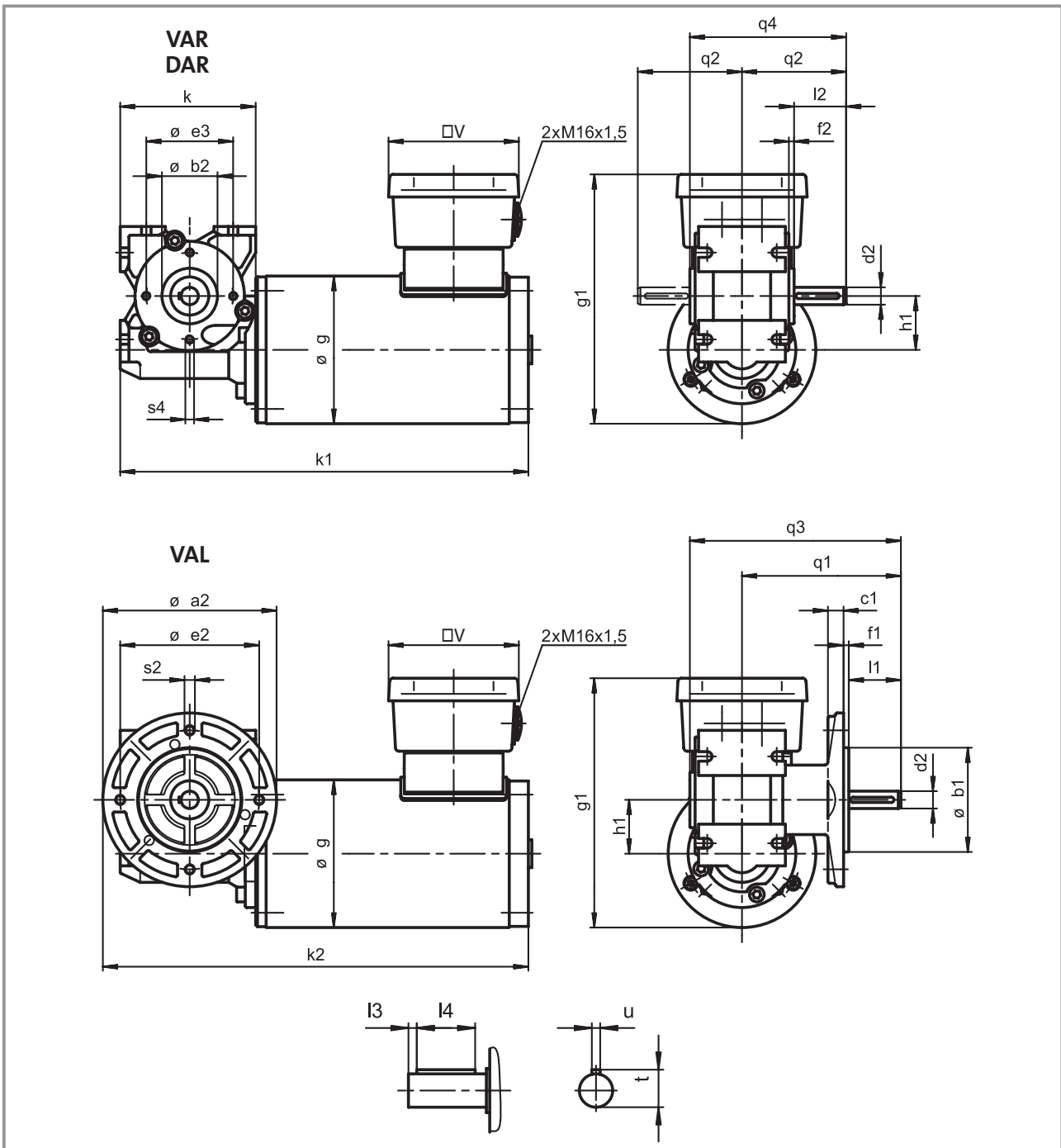
B-side motor design	0 = no built-on accessories		
	1 = with spring-applied brake		
	7 = for brake attachment		
Enclosure	IP54		
	IP55		
Brake supply voltage	24 V DC		
	230 V AC with bridge rectifier		
Gearbox type	VAR	Shaft D10x30mm	
		Shaft D12x40mm	
	VAL	Shaft D10x30mm	Flange D100mm
		Shaft D12x40mm	Flange D120mm
	DAR	Shaft D10x30mm	
		Shaft D12x40mm	
HAR			
Shaft position on type VAR			3 5
Flange/shaft position on type VAL			3 5
Mounting position			A B C D E F
Position of electrical connection			2 3 4 5

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SSN31-1UVA□-056C2□



Geared motor	a ₂	b ₁ j7	b ₂ h8	c ₁	d ₂ h6	e ₂	e ₃	f ₁	f ₂	g	g ₁	h ₁	k	k ₁	k ₂
SSN31-1UVA□-056C2□	100	60	32	9	10	80	50	3	3	85	144	31	78	235	245
	120	80	32	9	12	100	50	3	3	85	144	31	78	235	255

Geared motor	1	l ₂	l ₃	l ₄	q ₁	q ₂	q ₃	q ₄	s ₂	s ₄	t	u	v	Weight approx. kg
SSN31-1UVA□-056C2□	30	30	4	25	91.5	60	121.5	90	M6	M5	11.2	3	75	4.5
	40	40	4	28	101.5	70	131.5	100	M6	M5	13.5	4	75	4.6

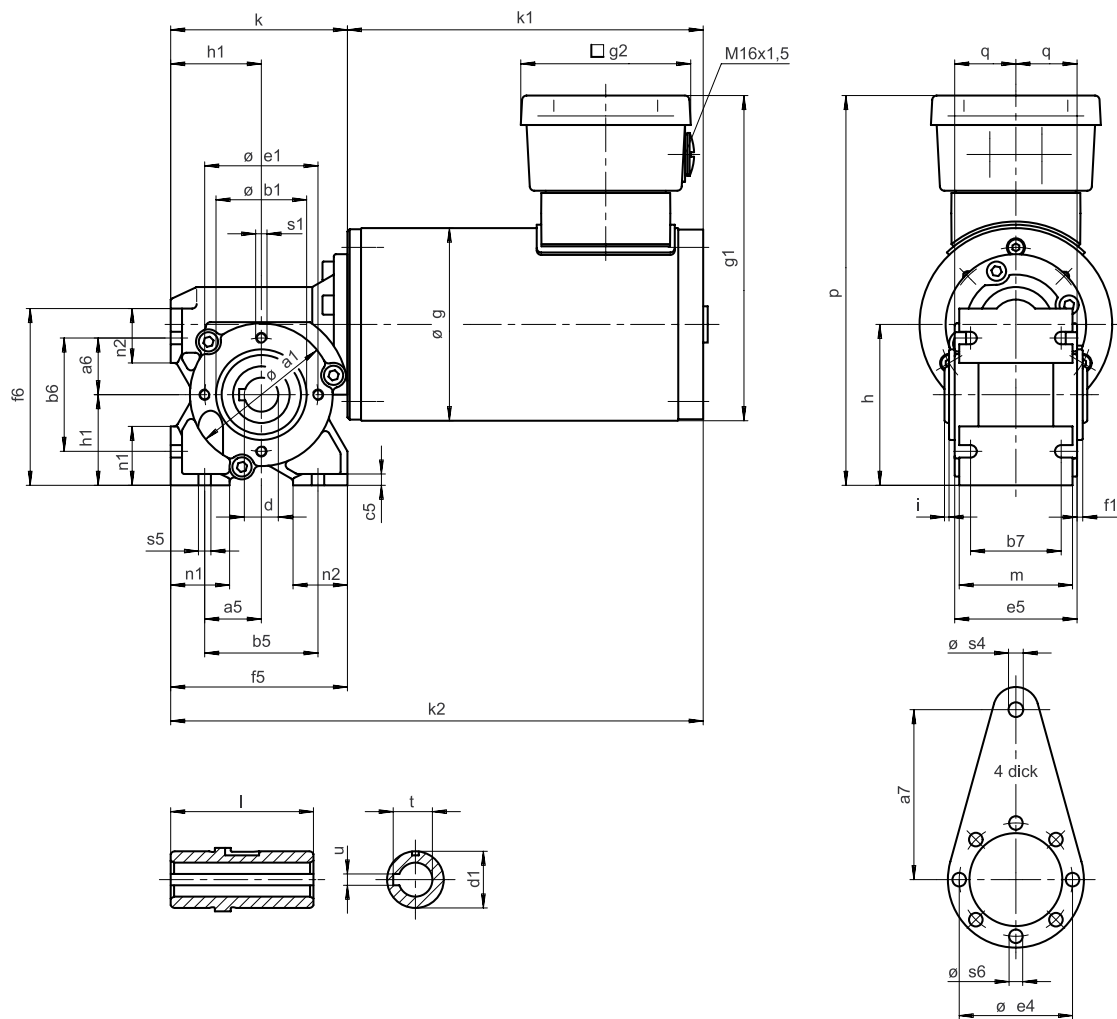
Dimensions in mm



Drive selection

AC worm geared motors (smooth housing)

Dimensions Type SSN31-1UHAR-056C2□



Geared motor	a ₁	a ₅	a ₆	a ₇	b ₁ h8	b ₅	b ₆	b ₇	c ₅	d H7	d ₁	e ₁	e ₄	e ₅	f ₁	f ₅	f ₆	g	g ₁
SSN31-1UHAR-056C2□	63	25	25	75	40	50	50	40	5	15	25	50	50	54	2.5	78	78	85	144

Geared motor	g ₂	h	h ₁	i	k	k ₁	k ₂	l	m	n ₁	n ₂	p	q	s ₁	s ₄	s ₅	s ₆	t	u	Weight approx. kg
SSN31-1UHAR-056C2□	75	71	40	2	78	157	235	63	50	26	24	172	27	M5	6.5	5.5	6	17.3	5	4.5

Dimensions in mm





Drive selection

AC planetary geared motors (smooth housing)

Selection table Type SPL42-□UVCR-035C2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.710.35.9.2.0	12	365	0.25	11.92	3.7	
		200	0.45	6.54	6.75	
		98	0.86	8.57	13.73	
		54	1.57	4.70	25.01	
		30	2.90	2.58	45.56	
		26	3.00	4.96	50.86	
		15	5.50	2.72	92.7	
		8	10.00	1.50	168.34	
13.710.35.9.2.0	25	730	0.26	11.52	3.7	
		400	0.47	6.31	6.75	
		197	0.90	8.28	13.73	
		108	1.65	4.54	25.01	
		59	3.00	2.49	45.56	
		53	3.13	4.79	50.86	
		29	5.70	2.63	92.7	
		16	10.30	1.45	168.34	

Additional order information

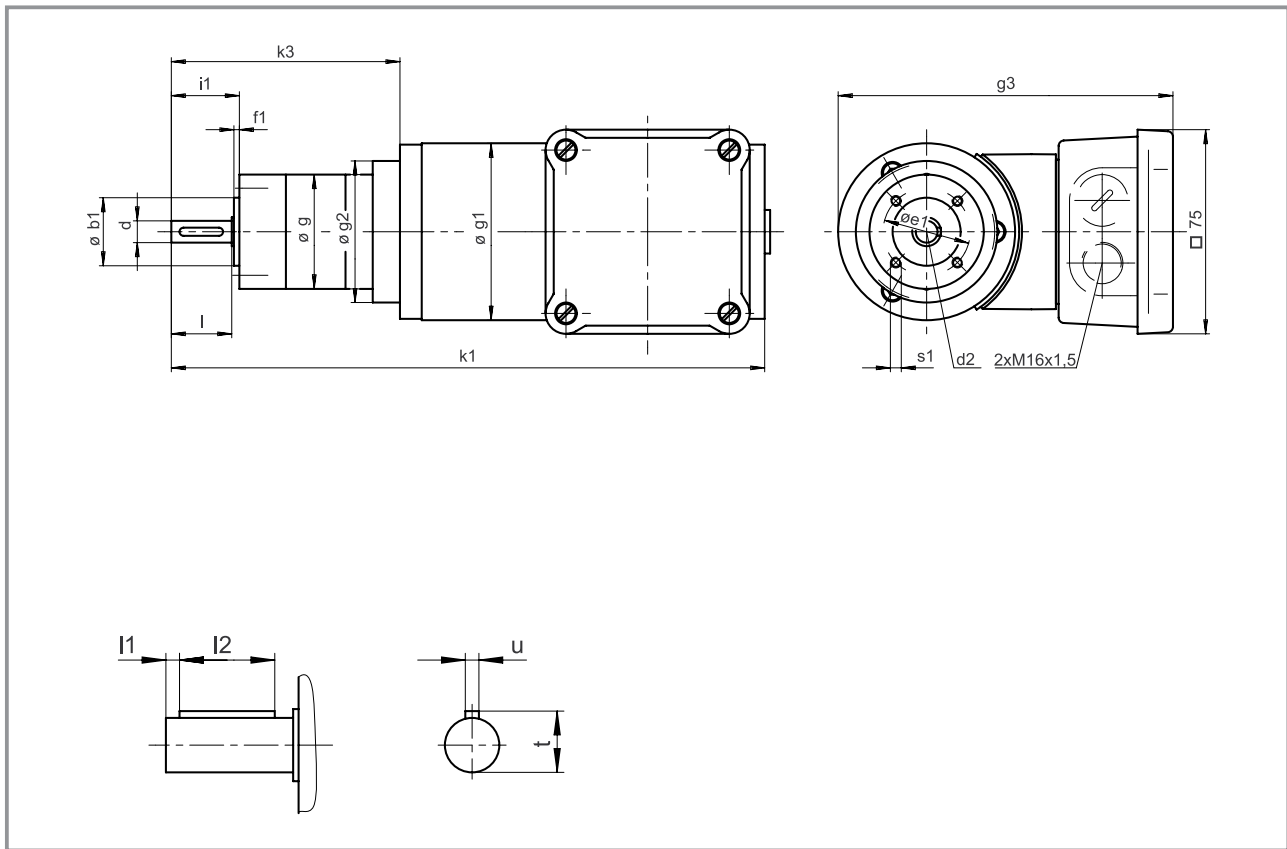
Enclosure	IP54	
	IP55	
Position of electrical connection		2

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SPL42-□UVCR-035C2□



Geared motor	Ratio i	b_1 h10	d g6	d_2	e_1	f_1	g	g_1	g_2	g_3
SPL42-□UVCR-035C2□	3.7	25	8	M3	32	2	42	65	52	123
	14 ... 46									
	51...169									

Geared motor	i_1	k_1	k_3	l	l_1	l_2	s_1	t	u	Weight approx. kg
SPL42-□UVCR-035C2□	25	218	84	22.2	3	16	M4x10	9.2	3	2.2
		231	97							2.3
		244	110							2.5

Dimensions in mm



Drive selection

AC planetary geared motors (smooth housing)

Selection table Type SPL52-□UVCR-056C2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.710.55.1.2.□	60	365	1.24	3.22	3.70	
		200	2.20	1.76	6.75	
		98	4.32	2.77	13.73	
		54	7.87	1.52	25.01	
		30	12.00	0.84	45.56	
		26	14.95	1.67	50.86	
		15	25.00	0.92	92.70	
		8	25.00	0.51	168.34	
13.710.55.1.2.□	90	730	0.94	4.22	3.70	
		400	1.70	2.31	6.75	
		197	3.29	3.64	13.73	
		108	6.00	2.00	25.01	
		59	10.39	1.10	45.56	
		53	11.39	2.19	50.86	
		29	20.76	1.20	92.70	
		16	25.00	0.66	168.34	

Additional order information

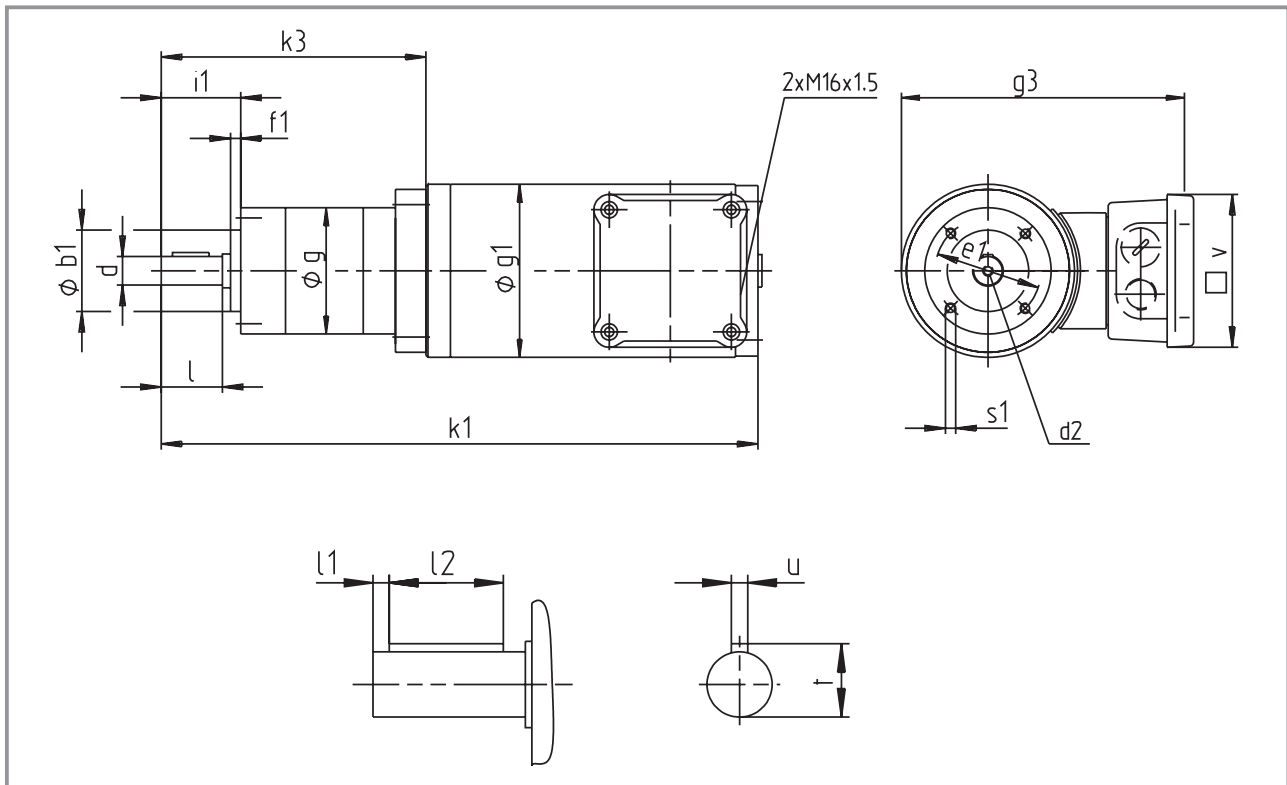
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Enclosure	IP54	
	IP55	
Position of electrical connection		2

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SPL52-□UVCR-056C2□



Geared motor	Ratio i	b_1	d h7	d_2	e_1	f_1	g	g_1	g_3	i_1
SPL52-□UVCR-056C2□	3.7	32	12	M4	40	3	52	85	144	25
	14 ... 46	h8								
	51...169									

Geared motor	k_1	k_3	l	l_1	l_2	s_1	t	u	v	Weight approx. kg
SPL52-□UVCR-056C2□	262	99	20.8	2.5	16	M5x10	13.5	4	75	4.6
	276	113								4.8
	290	127								5.0

Dimensions in mm



Drive selection

AC planetary geared motors (smooth housing)

Selection table Type SPL62-□UVCR-056C2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.710.55.1.2.□	60	365	1.24	6.44	3.70	
		200	2.20	3.53	6.75	
		98	4.32	5.78	13.73	
		54	7.87	3.17	25.01	
		30	15.35	1.74	45.56	
		26	14.95	3.34	50.89	
		20	20.92	2.39	71.16	
		14	29.25	1.71	99.50	
		11	36.44	1.37	123.97	
13.710.55.1.2.□	90	730	0.94	8.45	3.70	
		400	1.70	4.63	6.75	
		197	3.29	7.59	13.73	
		108	6.00	4.17	25.01	
		59	10.39	2.29	45.56	
		53	11.39	4.39	50.89	
		38	15.93	3.14	71.16	
		27	22.28	2.24	99.50	
		22	27.76	1.80	123.97	

Additional order information

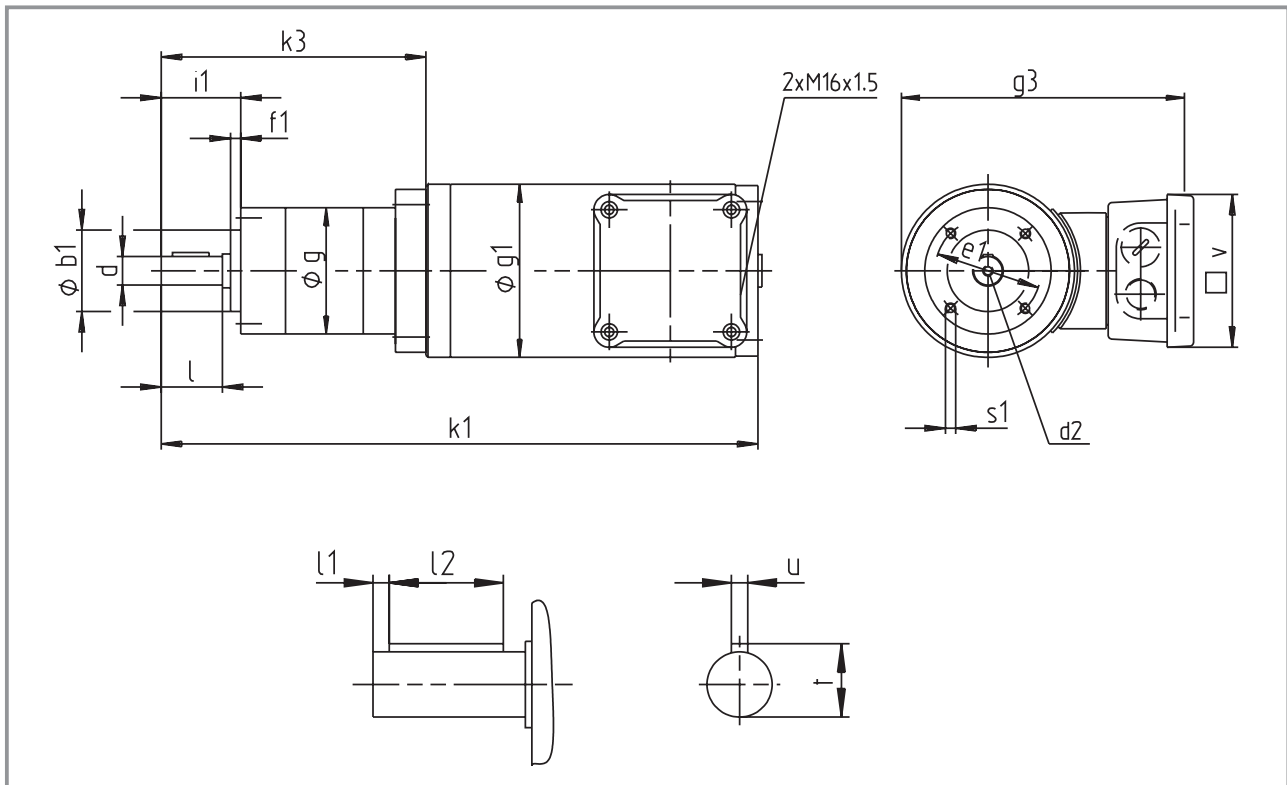
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Enclosure	IP54	
	IP55	
Position of electrical connection		2

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SPL62-□UVCR-056C2□



Geared motor	Ratio i	b_1	d h7	d_2	e_1	f_1	g	g_1	g_3	i_1
SPL62-□UVCR-056C2□	3.7	40	14	M5	52	5	62	85	144	39
	14 ... 46	j7								
	51...169									

Geared motor	k_1	k_3	l	l_1	l_2	s_1	t	u	v	Weight approx. kg
SPL62-□UVCR-056C2□	278	115	30	5.5	18	M5x10	16	5	75	4.5
	294	131								4.9
	310	147								5.3

Dimensions in mm



Drive selection

AC worm geared motors (ribbed housing)

Selection table Type SSN25-1U□□□-045C2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.751.45.2.□.□	30	270	0.90	8.23	5	
		169	1.30	5.87	8	
		135	1.50	5.29	10	
		90	2.00	3.72	15	
		68	2.50	3.28	20	
		45	3.10	2.48	30	
		34	3.60	1.94	40	
		27	3.80	1.59	50	
		23	4.20	1.35	60	
13.751.45.2.□.□	60	540	0.90	8.23	5	
		388	1.30	5.87	8	
		270	1.50	5.29	10	
		180	2.00	3.72	15	
		135	2.50	3.28	20	
		90	3.10	2.48	30	
		68	3.50	1.94	40	
		54	3.80	1.54	50	
		45	4.20	1.35	60	

Additional order information

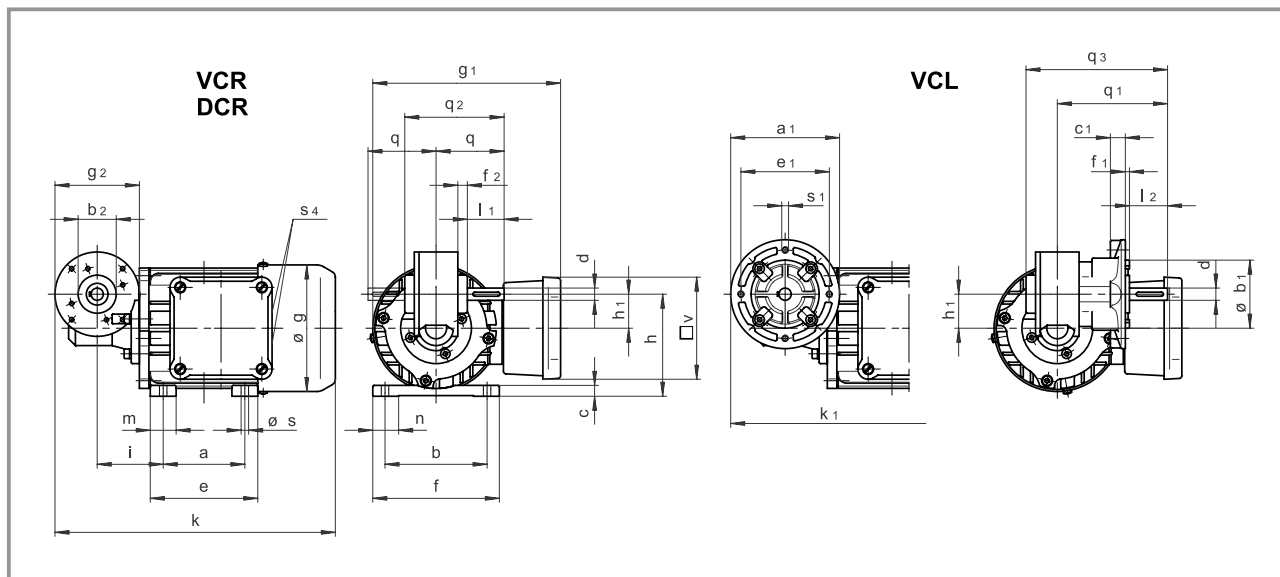
Motor design	2 = B14	
	5 = B3/B14	
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Enclosure	IP54	
	IP55	
Gearbox type	VCR	
	DCR	
	VCL	
Shaft position on type VCR		3 5
Flange/shaft position on type VCL		3 5
Mounting position		A B C D E F
Position of electrical connection on motor type B3/B14		2 3 5
Position of electrical connection on motor type B14		2 3 4 5

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SSN25-1UVCI-045C2I



Geared motor	a B3	a ₁ B14 Ø	b B3	b ₁ B14 j7	b ₂ B3 h11	c B3	c ₁ B14	d h6	e B3	e ₁ B14	f B3	f ₁ B14	f ₂ B3	g	g ₁	g ₂ B3 Ø	h B3	h ₁	i B3
SSN25-1UVCI-045C2I	60	80	75	50	28	8	8	9	79	65	93	3	7	93	137.5	62	75	25	48.5

Geared motor	k B3	k ₁ B14	l ₁ B3	l ₂ B14	l ₃	l ₄	m B3	n B3	q B3	q ₁ B14	q ₂ B3	q ₃ B14	s B3	s ₁ B14	s ₄	t	u	v	Weight approx. kg
SSN25-1UVCI-045C2I	206	215	27	28	3	20	19	19	50	81	73	104	5.5	M5	2xM16x1.5	10.2	3	75	2.85

Dimensions in mm



Drive selection

AC worm geared motors (ribbed housing)

Selection table Type SSN31-1U□□□-056C2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.751.55.3.□. □	90	270	2.72	5.15	5	
		192	3.72	3.77	7	
		135	4.93	2.84	10	
		90	7.10	2.25	15	
		68	8.83	1.70	20	
		54	9.76	1.43	25	
		45	11.33	1.32	30	
		35	13.86	1.15	38	
		27	13.00	0.88	50	
		24	15.00	0.82	55	
		18	11.00	0.64	75	
		14	11.00	0.45	100	
13.751.55.3.□. □	150	540	2.25	6.22	5	
		385	3.08	4.55	7	
		270	4.08	3.43	10	
		180	5.88	2.72	15	
		135	7.31	2.05	20	
		108	8.08	1.73	25	
		90	9.38	1.60	30	
		71	11.48	1.39	38	
		54	12.19	1.07	50	
		49	15.00	0.99	55	
		36	11.00	0.77	75	
		27	11.00	0.55	100	

Additional order information

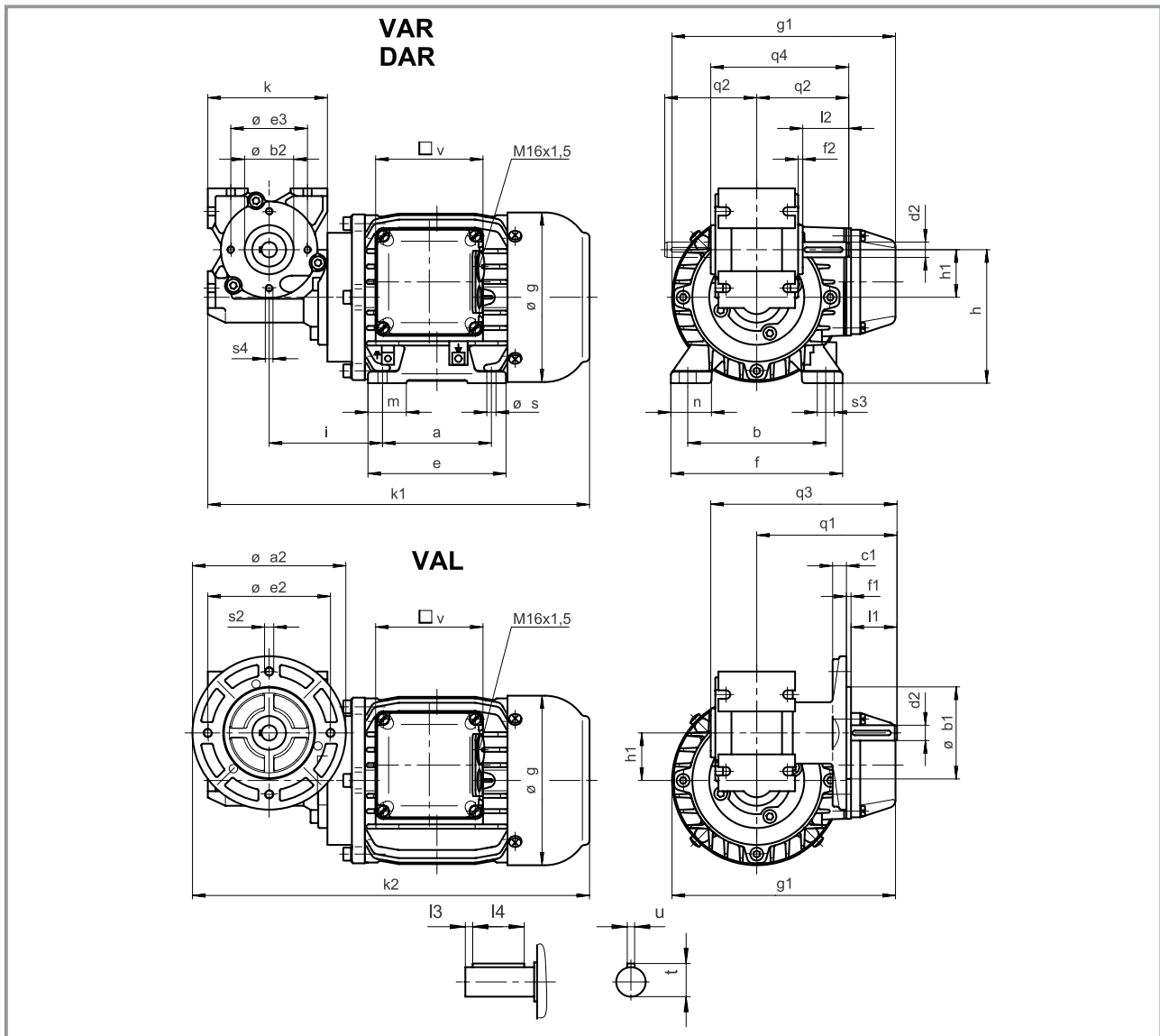
Motor type	2 = B14	
	5 = B3/B14	
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Enclosure	IP54	
	IP55	
Gearbox type	VAR	Shaft D10x30mm
		Shaft D12x40mm
	VAL	Shaft D10x30mm Flange D100mm
		Shaft D12x40mm Flange D120mm
	DAR	Shaft D10x30mm
		Shaft D12x40mm
	HAR	
Shaft position on type VAR		3 5
Flange/shaft position on type VAL		3 5
Mounting position		A B C D E F
Position of electrical connection on motor type B14		2 3 4 5
Position of electrical connection on motor type B3/B14		2 3 5

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SSN31-1UVA□-056C2□



Geared motor	a	a ₂	b	b ₁ j7	b ₂ h8	c ₁	d ₂ h6	e	e ₂	e ₃	f	f ₁	f ₂	g	g ₁	h	h ₁	i	k
SSN31-1UVA□-056C2□	71	100	90	60	32	9	10	90	80	50	112	3	3	111	148	87	31	74	78
	71	120	90	80	32	9	12	90	100	50	112	3	3	111	148	87	31	74	78

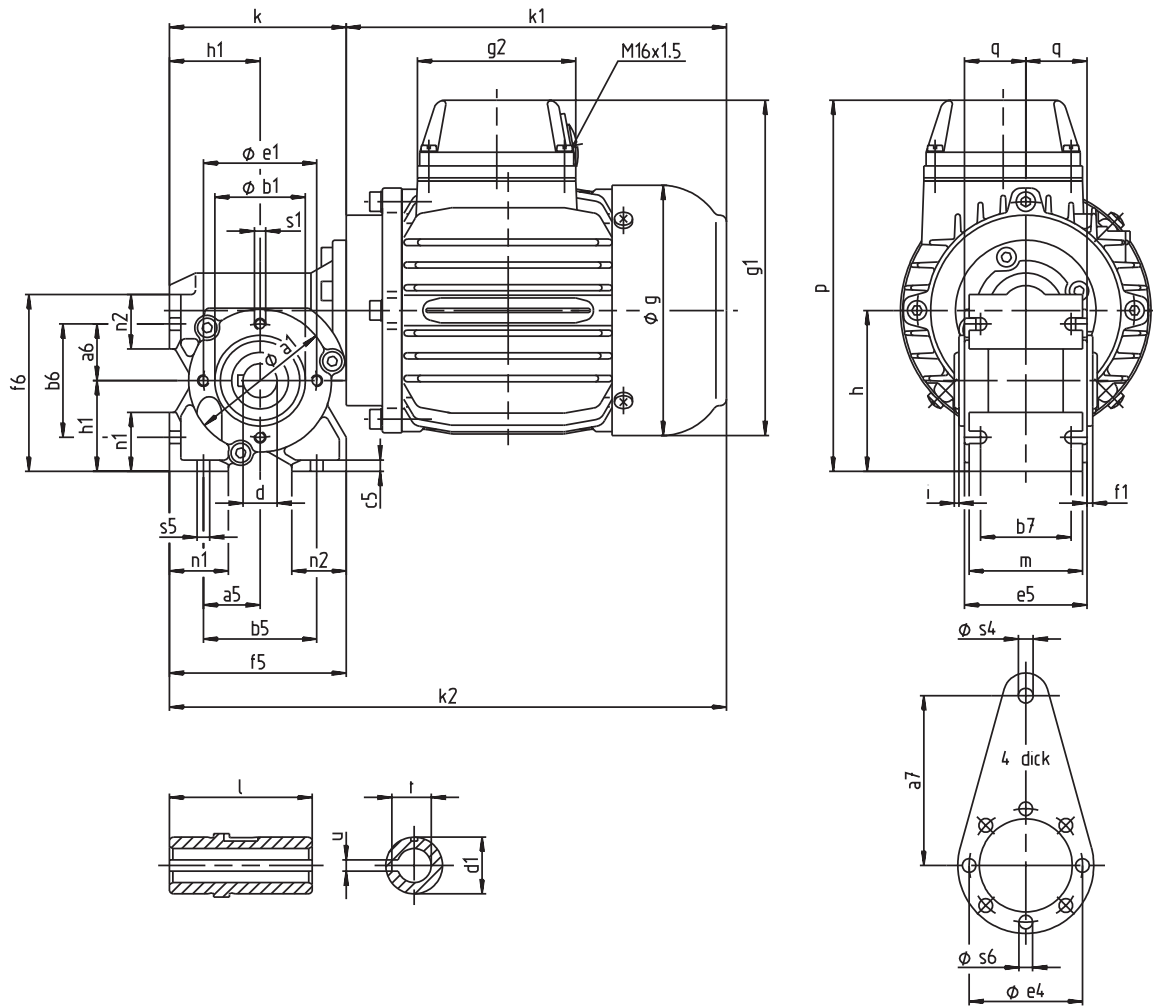
Geared motor	k ₁	k ₂	l ₁	l ₂	l ₃	l ₄	m	n	q ₁	q ₂	q ₃	q ₄	s	s ₂	s ₃	s ₄	t	u	v	Weight approx. kg
SSN31-1UVA□-056C2□	246	255	30	30	4	25	25	26	91.5	60	121.5	90	6	M6	11	M5	11.2	3	70	4.5
	246	265	40	40	4	28	25	26	101.5	70	131.5	100	6	M6	11	M5	13.5	4	70	4.6

Dimensions in mm

Drive selection

AC worm geared motors (ribbed housing)

Dimensions Type SSN31-1UHAR-056C2□



Geared motor	a ₁	a ₅	a ₆	a ₇	b ₁ h8	b ₅	b ₆	b ₇	c ₅	d H7	d ₁	e ₁	e ₄	e ₅	f ₁	f ₅	f ₆	g	g ₁
SSN31-1UHAR-056C2□	63	25	25	75	40	50	50	40	5	15	25	50	50	54	2.5	78	78	111	148

Geared motor	g ₂	h	h ₁	i	k	k ₁	k ₂	l	m	n ₁	n ₂	p	q	s ₁	s ₄	s ₅	s ₆	t	u	Weight approx. kg
SSN31-1UHAR-056C2□	70	71	40	2	78	167	245	63	50	26	24	164	27	M5	6.5	5.5	6	17.3	5	4.5

Dimensions in mm





Drive selection

AC worm geared motors (ribbed housing)

Selection table Type SSN40-1U□□□-063C2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.751.65.5.□.□	180	200	8.00	4.86	6.75	
		135	11.40	3.40	10	
		90	15.80	2.34	15	
		68	20.10	1.89	20	
		54	22.70	1.43	25	
		45	26.40	1.52	30	
		34	31.80	1.20	40	
		27	32.00	0.93	50	
		23	23.00	0.79	60	
		17	24.00	0.61	80	
13.751.65.5.□.□	250	407	4.80	7.18	6.75	
		270	6.90	5.02	10	
		180	9.50	3.46	15	
		135	12.20	2.78	20	
		108	13.70	2.11	25	
		90	15.90	2.25	30	
		68	19.20	1.76	40	
		54	23.20	1.38	50	
		45	19.60	1.17	60	
		34	24.00	0.89	80	

Additional order information

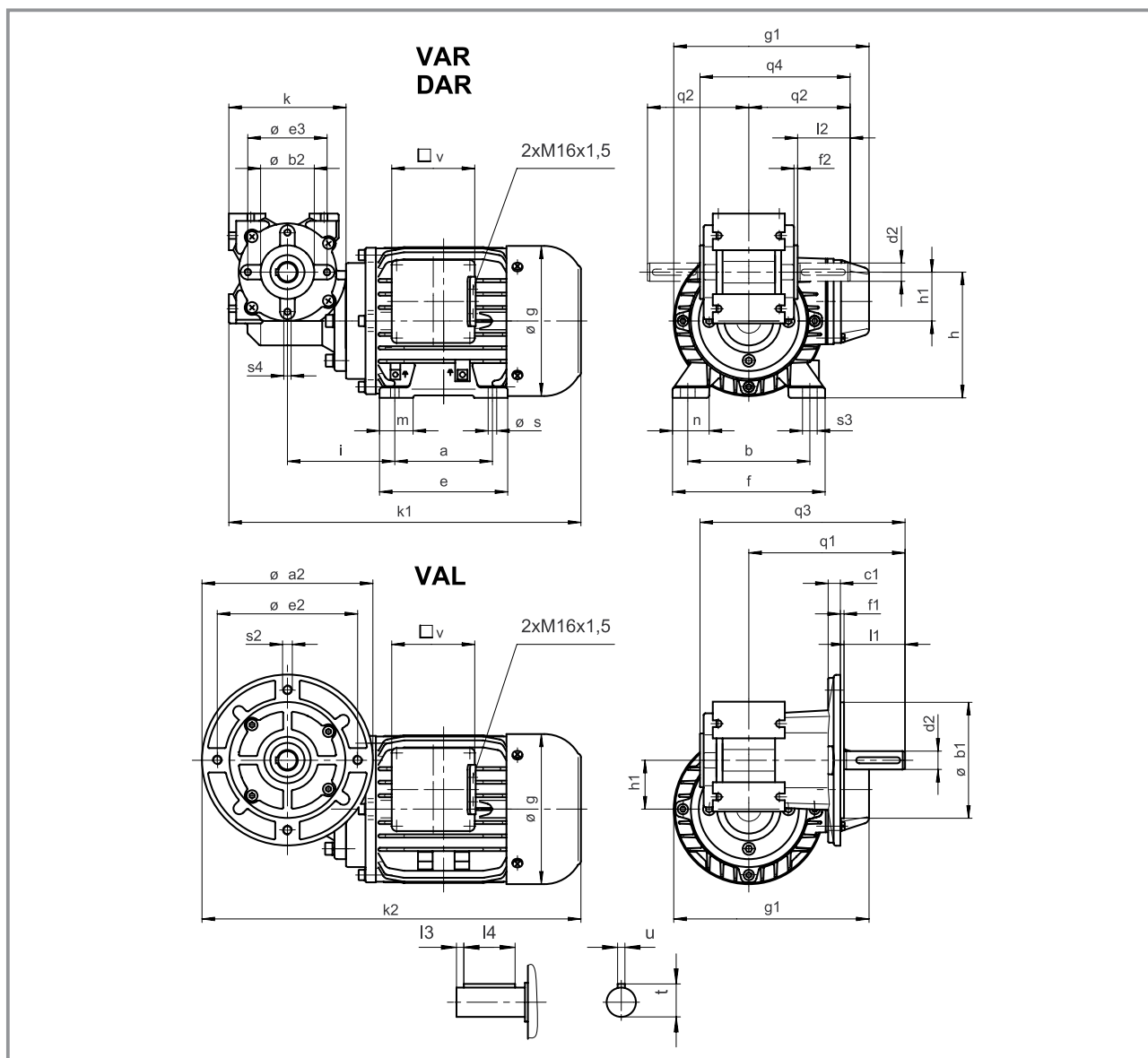
Motor type	2 = B14	
	5 = B3/B14	
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Enclosure	IP54	
	IP55	
Gearbox type	VAR	
	DAR	
	VAL	
	HAR	
Shaft position on type VAR		3 5
Flange/shaft position on type VAL		3 5
Mounting position		A B C D E F
Position of electrical connection on motor type B14		2 3 4 5
Position of electrical connection on motor type B3/B14		2 3 5

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SSN40-1UVA□-063C2□



Geared motor	a	a ₂	b	b ₁ j7	b ₂ h10	c ₁	d ₂ h6	e	e ₂	e ₃	f	f ₁	f ₂	g	g ₁	h	h ₁	i	k
SSN40-1UVA□-063C2□	80	140	100	95	44	10	15	105	115	65	125	3	3	123	160	103	40	88	96

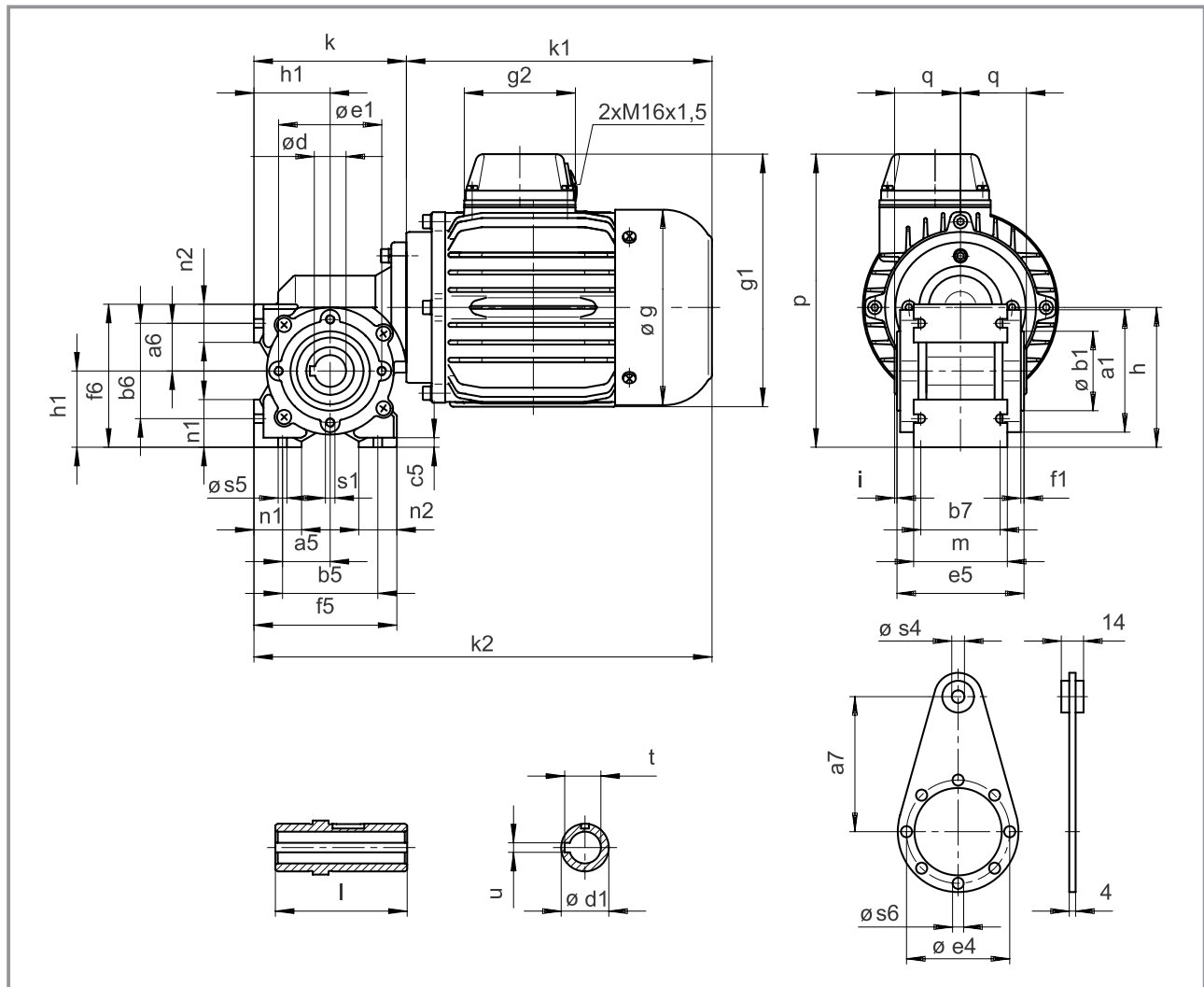
Geared motor	k ₁	k ₂	l ₁	l ₂	l ₃	l ₄	m	n	q ₁	q ₂	q ₃	q ₄	s	s ₂	s ₃	s ₄	t	u	v	Weight approx. kg
SSN40-1UVA□-063C2□	289	311	50	43	4	36	27.5	30	128	83	168	123	7	M8	12	M6	17	5	70	6.5

Dimensions in mm

Drive selection

AC worm geared motors (ribbed housing)

Dimensions Type SSN40-1UHAR-063C2□



Geared motor	a ₁	a ₅	a ₆	a ₇	b ₁ h ₈	b ₅	b ₆	b ₇	c ₅	d H7	d ₁	e ₁	e ₄	e ₅	f ₁	f ₅	f ₆	g	g ₁
SSN40-1UHAR-063C2□	77	30	30	85	50	60	60	50	6	20	30	65	65	80	2	90	90	123	160

Geared motor	g ₂	h	h ₁	i	k	k ₁	k ₂	l	m	n ₁	n ₂	p	q	s ₁	s ₄	s ₅	s ₆	t	u	Weight approx. kg
SSN40-1UHAR-063C2□	70	88	48	1.5	96	193	289	83	59	30	24	185	41.5	M6	8	5.5	7	22.8	6	6.5

Dimensions in mm





Drive selection

AC planetary geared motors (ribbed housing)

Selection table Type SPL52-□UVCR-056N2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.750.55.1.2.□	90	365	1.89	4.22	3.7	
		200	3.30	2.31	6.75	
		98	6.59	3.79	13.73	
		54	12.00	2.08	25.01	
		38	16.78	1.49	34.97	
		30	21.86	1.14	45.56	
		26	22.78	2.19	50.89	
		20	31.87	1.57	71.16	
		14	44.57	1.12	99.5	
		11	50.00	0.90	123.97	
13.750.55.1.2.□	150	730	1.56	5.10	3.7	
		400	2.80	2.80	6.75	
		197	5.45	4.58	13.73	
		108	9.94	2.51	25.01	
		77	16.78	1.80	34.97	
		59	18.11	1.38	45.56	
		53	18.86	2.65	50.89	
		38	26.40	1.89	71.16	
		27	36.91	1.35	99.5	
		22	45.99	1.09	123.97	

Additional order information

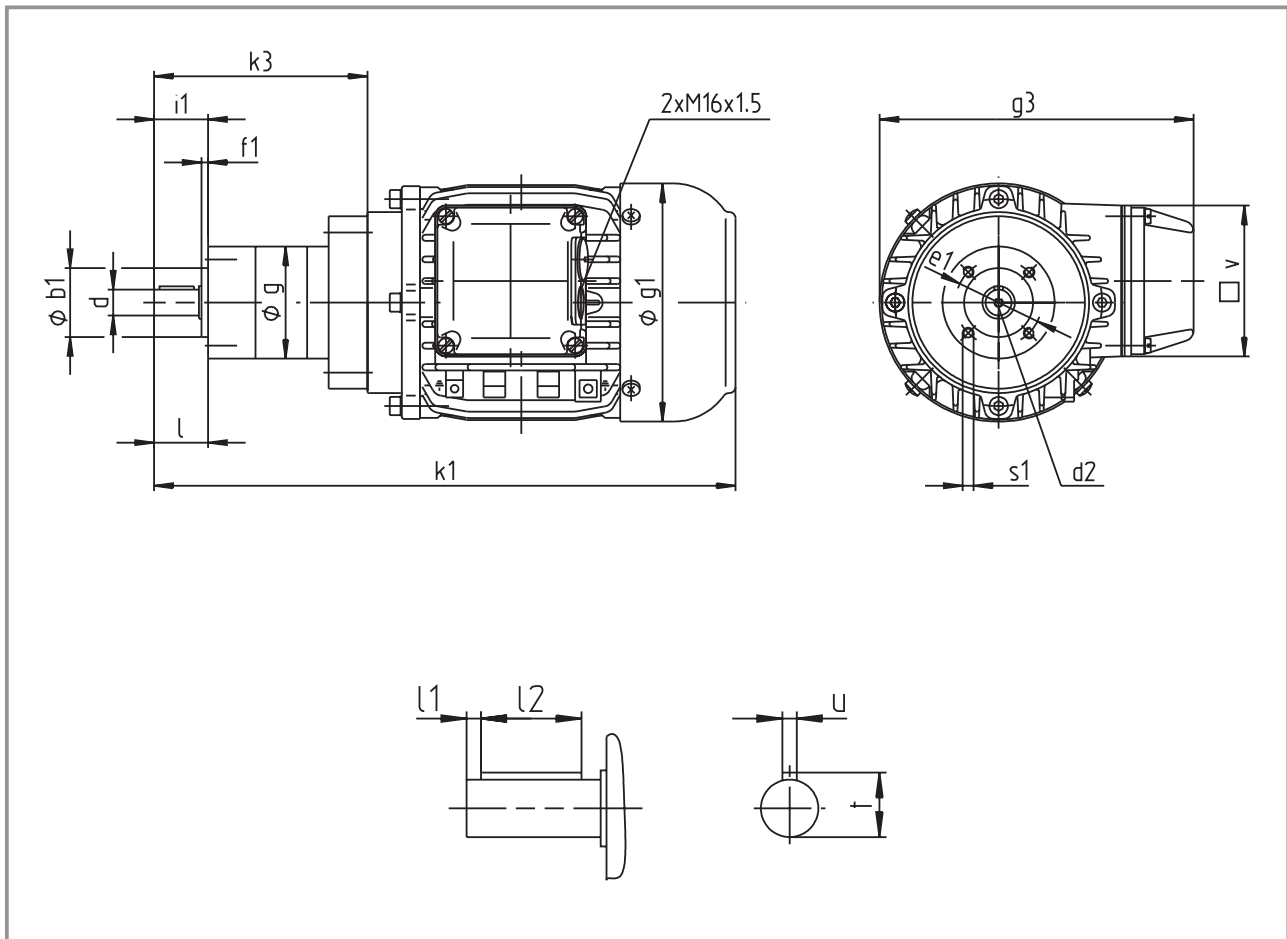
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Enclosure	IP54	
	IP55	
Position of electrical connection		2

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SPL52-□UVCR-056N2□



Geared motor	Ratio i	b_1	d h7	d_2	e_1	f_1	g	g_1	g_3	i_1
SPL52-□UVCR-056N2□	3.7	32	12	M4	40	3	52	111	146	25
	14 ... 46									
	51...169									

Geared motor	k_1	k_3	l	l_1	l_2	s_1	t	u	v	Weight approx. kg
SPL52-□UVCR-056N2□	265	99	20.8	2.5	16	M5x10	13.5	4	70	4.7
	279	113								4.9
	293	127								5.1

Dimensions in mm



Drive selection

AC planetary geared motors (ribbed housing)

Selection table Type SPL62-□UVCR-056N2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.750.55.1.2.□	90	365	1.89	4.22	3.7	
		200	3.30	2.31	6.75	
		98	6.59	3.79	13.73	
		54	12.00	2.08	25.01	
		38	16.78	1.49	34.97	
		30	21.86	1.14	45.56	
		26	22.78	2.19	50.89	
		20	31.87	1.57	71.16	
		14	44.57	1.12	99.5	
		11	50.00	0.90	123.97	
13.750.55.1.2.□	150	730	1.56	5.10	3.7	
		400	2.80	2.80	6.75	
		197	5.45	4.58	13.73	
		108	9.94	2.51	25.01	
		77	16.78	1.80	34.97	
		59	18.11	1.38	45.56	
		53	18.86	2.65	50.89	
		38	26.40	1.89	71.16	
		27	36.91	1.35	99.5	
		22	45.99	1.09	123.97	

Additional order information

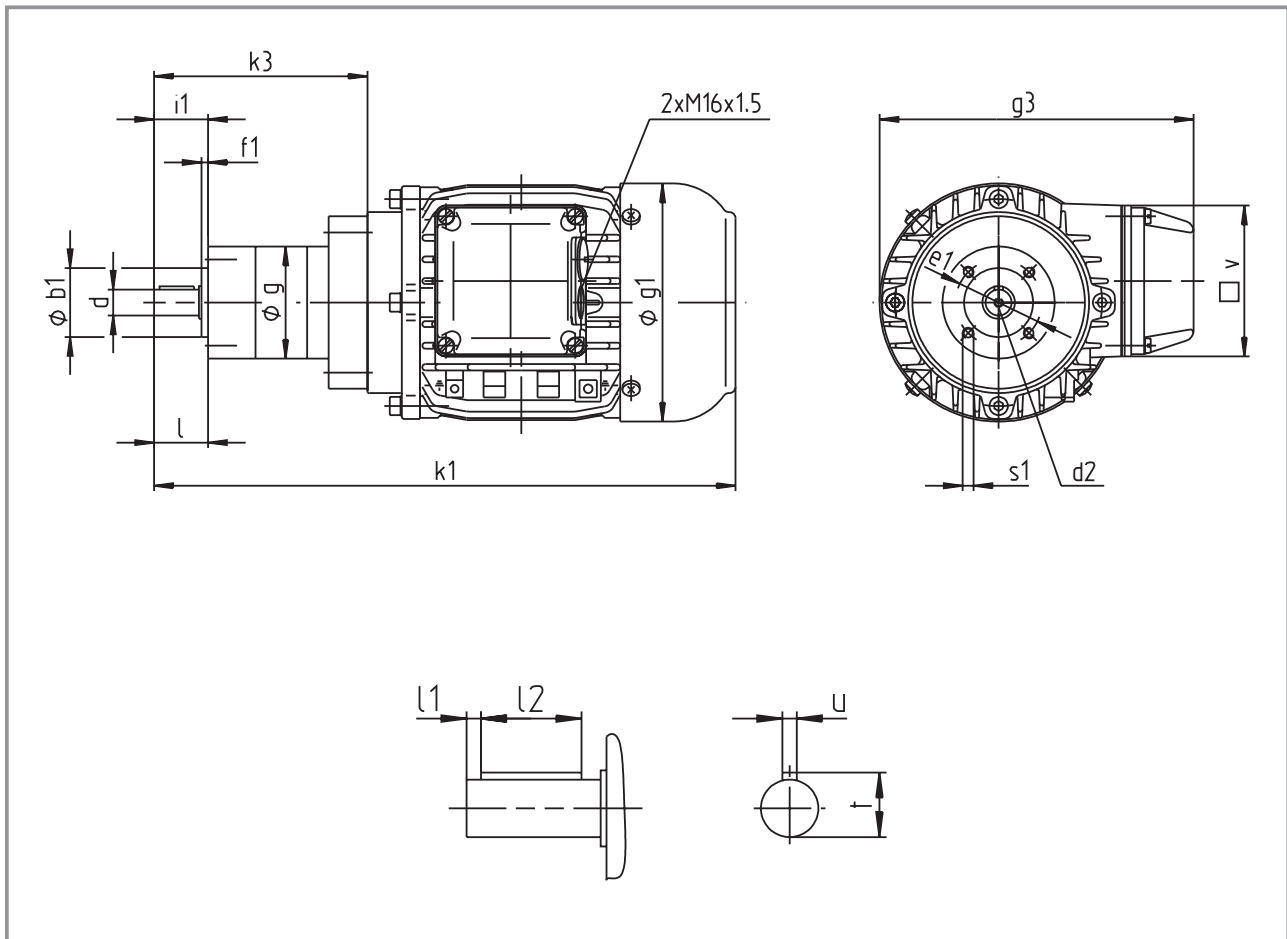
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Enclosure	IP54	
	IP55	
Position of electrical connection		2

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SPL62-□UVCR-056N2□



Gearbox size	Ratio i	b_1 h8	d h7	d_2	e_1	f_1	g	g_1	g_3	i_1
SPL62-□UVCR-056N2□	3.7	40	14	M5	52	5	62	111	146	39
	14 ... 46									
	51...124									

Gearbox size	k_1	k_3	l	l_1	l_2	s_1	t	u	v	Weight approx. kg
SPL62-□UVCR-056N2□	281	115	30	5.5	18	M5x10	16	5	70	4.6
	297	131								5.0
	313	147								5.4

Dimensions in mm



Drive selection

AC planetary geared motors (ribbed housing)

Selection table Type SPL62-UVCR-063N2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.750.65.1.2.□	180	365	3.75	2.13	3.7	
		200	6.80	1.17	6.75	
		98	13.07	1.91	13.73	
		54	23.92	1.05	25.01	
		38	25.00	0.75	34.97	
		30	25.00	0.58	45.56	
		26	45.21	1.10	50.89	
		20	50.00	0.79	71.16	
		14	50.00	0.57	99.5	
		11	50.00	0.45	123.97	
13.750.65.1.2.□	250	743	2.54	3.14	3.7	
		407	4.60	1.72	6.75	
		200	8.65	2.82	13.73	
		110	16.13	1.55	25.01	
		78	25.00	1.11	34.97	
		60	25.00	0.85	45.56	
		54	30.61	1.63	50.89	
		39	42.83	1.17	71.16	
		28	50.00	0.83	99.5	
		22	50.00	0.67	123.97	

Additional order information

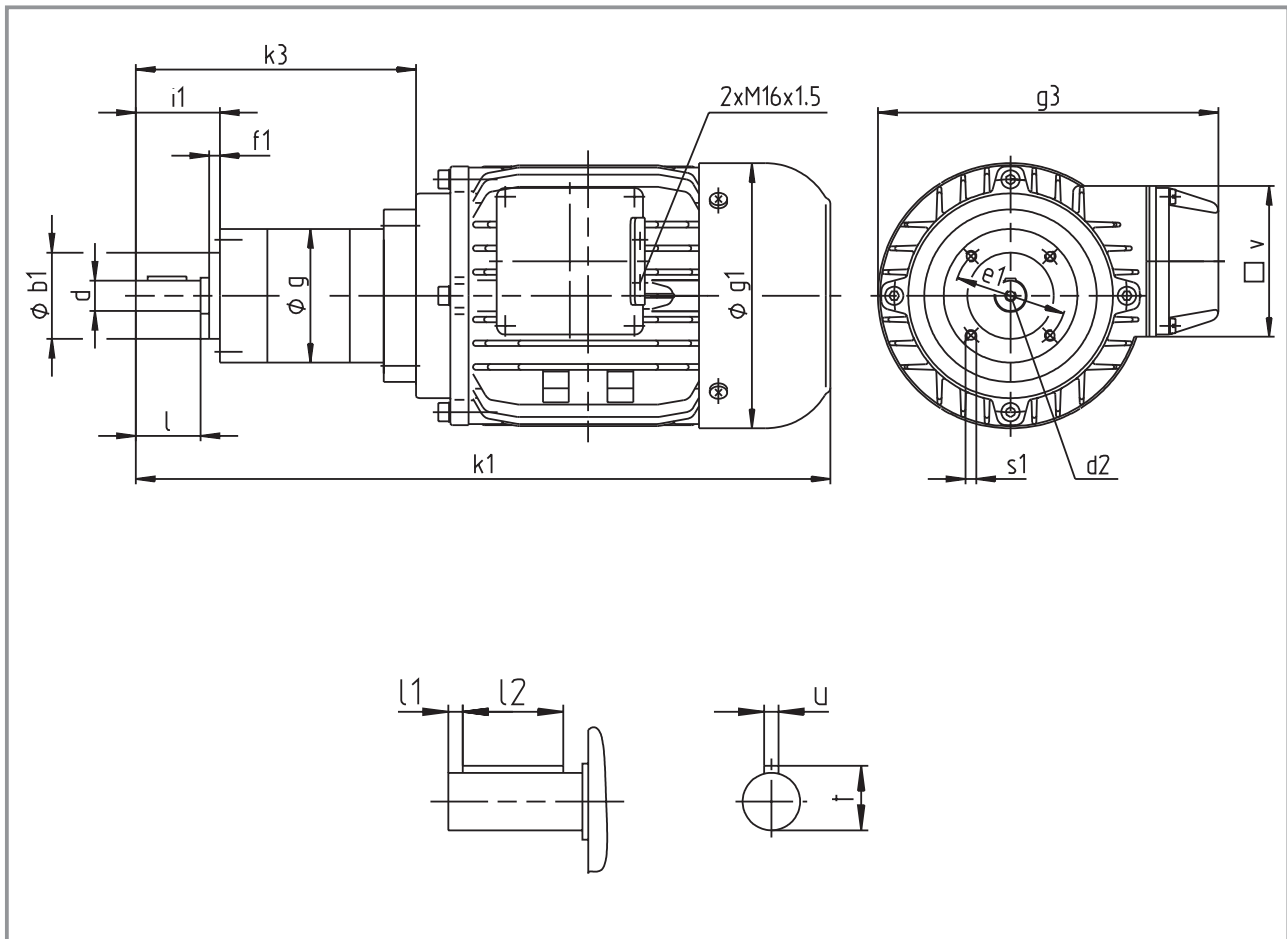
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Enclosure	IP54	
	IP55	
Position of electrical connection		2

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SPL62-UVCR-063N2□



Gearbox size	Ratio i	b_1 j7	d h7	d_2	e_1	f_1	g	g_1	g_3	i_1
SPL62-UVCR-063N2□	3.7	40	14	M5	52	5	62	111	160	39
	14 ... 46									
	51 ... 124									

Gearbox size	k_1	k_3	l	l_1	l_2	s_1	t	u	v	Weight approx. kg
SPL62-UVCR-063N2□	308	115	30	5.5	18	M5x10	16	5	70	5.9
	324	131								6.3
	340	147								6.7

Dimensions in mm



Drive selection

AC planetary geared motors (ribbed housing)

Selection table Type SPL81-□UVCR-063N2□

Motor type	P _N W	50 Hz			i	Selection (tick as required)
		n ₂ rpm	M ₂ Nm	c		
13.750.65.1.2.□	180	365	3.75	5.32	3.7	
		200	6.80	2.92	6.75	
		98	13.07	4.59	13.73	
		54	23.82	2.52	25.01	
		38	33.31	1.80	34.97	
		30	43.39	1.38	45.56	
		26	45.21	2.65	50.89	
		20	60.00	0.90	71.16	
		14	88.45	1.36	99.5	
		11	110.20	1.09	123.97	
13.750.65.1.2.□	250	743	2.54	7.86	3.7	
		407	4.60	4.31	6.75	
		200	8.65	6.78	13.73	
		110	16.13	3.72	25.01	
		78	22.55	2.66	34.97	
		60	29.38	2.04	45.56	
		54	30.61	3.92	50.89	
		39	42.83	2.80	71.16	
		28	59.89	2.00	99.5	
		22	74.62	1.61	123.97	

Additional order information

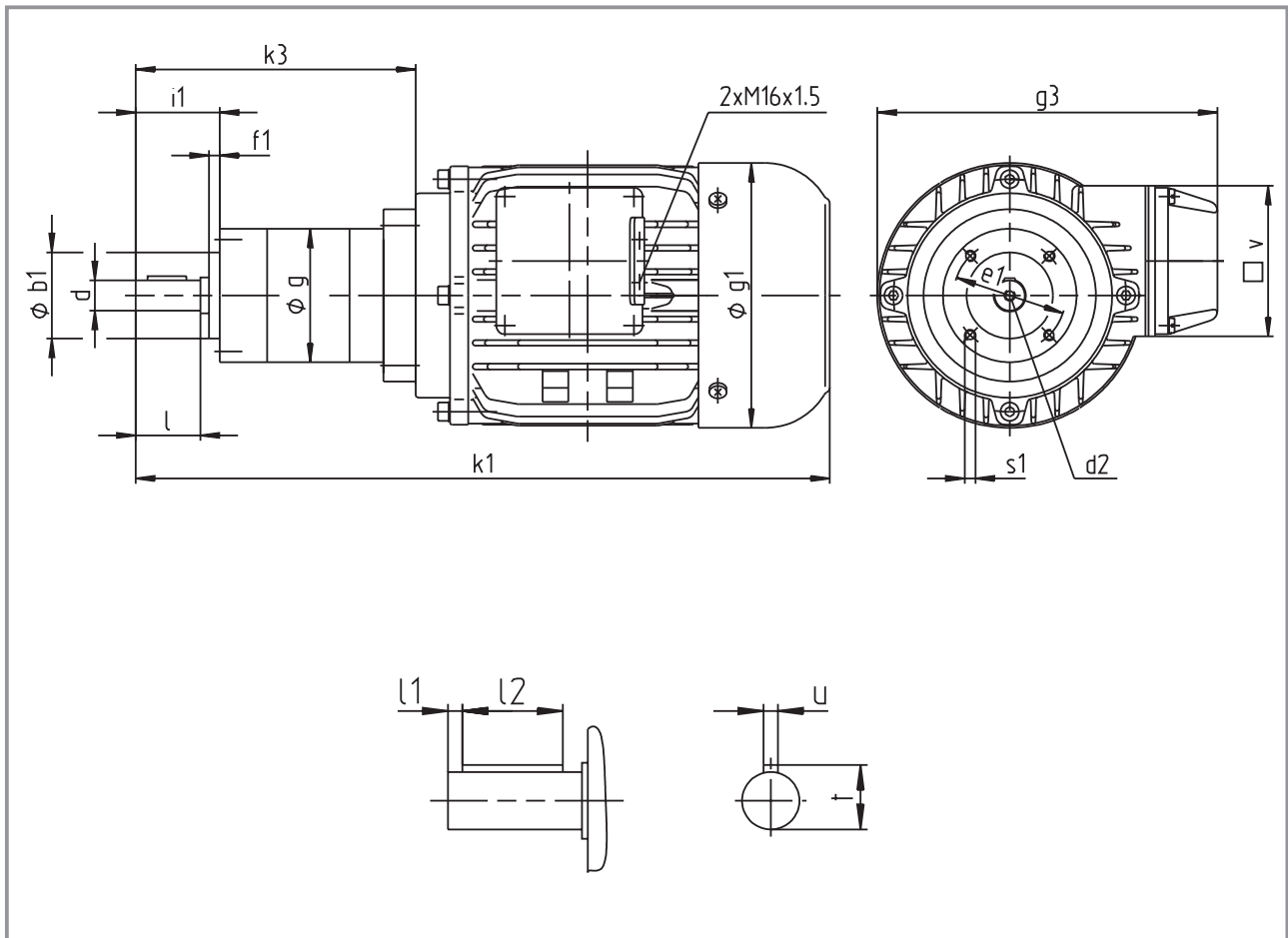
B-side design	0 = no built-on accessories	
	1 = with spring-applied brake	
	7 = for brake attachment	
Brake supply voltage	24 V DC	
	230 V AC with bridge rectifier	
Enclosure	IP54	
	IP55	
Position of electrical connection		2

Type code see pages 1-3 to 1-6.

Mounting position see cover fold-out.



Dimensions Type SPL81-□UVCR-063N2□



Gearbox size	Ratio i	b_1 j7	d h7	d_2	e_1	f_1	g	g_1	g_3	i_1
SPL81-□UVCR-063N2□	3.7	50	19	M6	65	5	81	123	160	49
	14 ... 46									
	51...124									

Gearbox size	k_1	k_3	l	l_1	l_2	s_1	t	u	v	Weight approx. kg
SPL81-□UVCR-063N2□	337	144	40	6	28	M6x12	21.5	6	70	7.1
	358	165								7.8
	380	187								8.5

Dimensions in mm