



**Operating values**

The load values for the elements indicated in the tables are applicable for individual installation.

For stacked installation of 2 or 3 boxes the load values indicated in the tables must be reduced:

**2 stacked boxes**  
current value x 0.9

**3 stacked boxes**  
current value x 0.83

**Dimensions** of the elements and diagram for

**Planning the elements** for short-term operation on page 1.10

**Standard elements**

Resistance values			Admissible load cycle duration 120 s and duty factor of					Max. Short-circuit current	Current-time integral I²t	Weight	offset at bottom		offset at top		Order no. 3PY6 201-
Rat.value	Cold value	Hot value	100%	60%	40%	25%	15%				ca. kg	Descr.	Order no.	Descr.	
mΩ	mΩ	mΩ	A	A	A	A	A	kA	kA²s	ca. kg	Descr.	Order no.	Descr.	Order no.	
4.7	4.2	5.5	334	428	514	646	799	12	38.2	1.0	WE 4,7	3A	WE 4,7/0	4A	
6.5	5.9	7.7	284	364	437	549	679	10	28.6	1.1	WE 6,5	3B	WE 6,5/0	4B	
9.0	8.1	10.6	242	309	371	467	577	9	20.8	1.17	WE 9	3C	WE 9/0	4C	
12.5	11.3	14.8	205	262	315	396	490	7.5	14.9	1.17	WE 12,5	3D	WE 12,5/0	4D	
17.5	15.8	20.7	173	222	266	335	414	6	9.66	0.97	WE 17,5	3E	WE 17,5/0	4E	
24	21.8	28.3	148	189	227	286	354	5.3	7.07	1.07	WE 24	3F	WE 24/0	4F	
34	30	40.1	124	159	191	240	197	4	4.74	0.9	WE 34	3G	WE 34/0	4G	
47	42	55.5	106	135	162	204	253	3.5	3.42	0.93	WE 47	3H	WE 47/0	4H	
65	59	77	90	115	138	174	215	3	2.47	0.94	WE 65	3J	WE 65/0	4J	
90	81	106	76	98	117	148	183	2.5	1.79	0.92	WE 90	3K	WE 90/0	4K	
125	113	148	65	83	100	125	155	2.1	1.08	0.88	WE 125	3L	WE 125/0	4L	
175	158	207	55	70	84	106	131	1.7	0.77	0.83	WE 175	3M	WE 175/0	4M	
240	220	280	47	60	72	90	112	1.4	0.57	0.78	WE 240	3N	WE240/0	4N	
360	320	420	37	49	59	74	91	0.9	0.38	0.77	WE 360	3P	WE 360/0	4P	
500	450	590	32	41	50	63	77	0.8	0.22	0.7	WE 500	3R	WE 500/0	4R	
700	630	830	27	35	42	53	65	0.65	0.16	0.64	WE 700	3S	WE 700/0	4S	

**Double elements**

Resistance values			Admissible load Cycle time 120 s and duty factor of					Max. Short-circuit current	Current-time integral I²t	Weight	offset at the bottom		offset at the top		Order no. 3PY6 201-
Rat.value	Cold value	Hot value	100%	60%	40%	25%	15%				ca. kg	Descr.	Order no.	Descr.	
mΩ	mΩ	mΩ	A	A	A	A	A	kA	kA²s	ca. kg	Descr.	Order no.	Descr.	Order no.	
2.35	2.1	2.75	478	612	735	924	1143	24	153	2	DWE 4,7	5A	DWE 4,7/0	6A	
3.25	2.95	3.85	406	520	624	785	971	20	114	2.2	DWE 6,5	5B	DWE 6,5/0	6B	
4.5	4.05	5.3	345	442	530	667	825	18	83	2.2	DWE 9	5C	DWE 9/0	6C	
6.25	5.65	7.4	293	375	450	566	700	15	59.5	2.3	DWE 12,5	5D	DWE 12,5/0	6D	
8.75	7.9	10.4	248	317	381	479	593	12	38.6	2	DWE 17,5	5E	DWE 17,5/0	6E	
12	10.8	14.2	211	270	324	408	504	10.6	28.3	2.1	DWE 24	5F	DWE 24/0	6F	
17	15	20.1	177	226	272	342	423	8	19	1.8	DWE 34	5G	DWE 34/0	6G	
23.5	21	27.8	151	193	232	292	361	7	13.7	1.85	DWE 47	5H	DWE 47/0	6H	
32.5	29.5	38.5	128	164	196	247	306	6	9.87	1.9	DWE 65	5J	DWE 65/0	6J	
45	40.5	53	109	139	167	210	260	5	7.17	1.8	DWE 90	5K	DWE 90/0	6K	
62.5	56.5	74	92	117	141	178	220	4.2	4.32	1.7	DWE 125	5L	DWE 125/0	6L	
87.5	79	104	77	98	118	148	184	3.4	3.09	1.65	DWE 175	5M	DWE 175/0	6M	
120	110	140	64	82	98	123	153	2.8	2.29	1.5	DWE 240	5N	DWE240/0	6N	

Element	Load A <sup>1)</sup> per strand for 3 stacked resistors and a duty factor d.f. of (cycle time 120 s)						Resistance values Ω for resistor size 3PR3①01-..					Order supplement 3PR3①01- ④⑤
	100%	60%	40%	25%	15%	5%	0	2	4	6	8	

## 1-strand resistors in standard bank design

WE	100%	60%	40%	25%	15%	5%	0	2	4	6	8	④⑤
4.7	275	350	420	535	660	980	0.06	0.09	0.12	0.15	0.18	1A
6.5	230	300	355	450	550	830	0.09	0.12	0.16	0.2	0.24	1B
9	200	255	305	390	480	710	0.12	0.17	0.23	0.28	0.34	1C
12.5	170	215	260	330	410	600	0.16	0.24	0.31	0.39	0.46	1D
17.5	140	180	220	275	335	510	0.23	0.33	0.44	0.55	0.65	1E
24	120	155	185	235	290	430	0.31	0.46	0.6	0.75	0.89	1F
34	100	130	160	195	240	365	0.44	0.65	0.85	1.0	1.3	1G
47	86	110	135	168	205	305	0.61	0.89	1.18	1.45	1.75	1H
65	73	95	115	143	175	260	0.85	1.24	1.63	2.0	2.4	1J
90	63	82	100	124	150	225	1.17	1.7	2.25	2.8	3.35	1K
125	53	70	85	105	127	190	1.6	2.4	3.1	3.9	4.6	1L
175	45	60	70	88	108	160	2.3	3.3	4.4	5.5	6.5	1M
240	38	50	60	74	91	135	3.1	4.6	6.0	7.5	8.9	1N
360	31	39	48	60	74	110	4.7	6.8	9.0	11.1	13.3	1P
500	26	33	40	51	63	90	6.5	9.5	12.5	15.5	18.5	1R
700	22	28	34	43	53	78	9.1	13.3	17.5	21.7	26.0	1S

## 3-strand resistors in standard bank design

WE	100%	60%	40%	25%	15%	5%	0 3x	2 3x	4 3x	6 3x	8 3x	④⑤
4.7	275	350	420	535	660	980	0.014	0.023	0.03	0.04	0.05	3A
6.5	230	300	355	450	550	830	0.019	0.032	0.04	0.06	0.07	3B
9	200	255	305	390	480	710	0.027	0.045	0.06	0.08	0.1	3C
12.5	170	215	260	330	410	600	0.037	0.062	0.09	0.11	0.14	3D
17.5	140	180	220	275	335	510	0.052	0.087	0.12	0.15	0.19	3E
24	120	155	185	235	290	430	0.072	0.12	0.17	0.21	0.26	3F
34	100	130	160	195	240	365	0.1	0.17	0.24	0.30	0.37	3G
47	86	110	135	168	205	305	0.14	0.23	0.33	0.42	0.52	3H
65	73	95	115	143	175	260	0.195	0.32	0.45	0.58	0.72	3J
90	63	82	100	124	150	225	0.27	0.45	0.63	0.81	1.0	3K
125	53	70	85	105	127	190	0.37	0.62	0.87	1.12	1.4	3L
175	45	60	70	88	108	160	0.52	0.87	1.22	1.55	1.9	3M
240	38	50	60	74	91	135	0.72	1.2	1.65	2.15	2.6	3N
360	31	39	48	60	74	110	1.1	1.8	2.5	3.2	4.0	3P
500	26	33	40	51	63	90	1.5	2.5	3.5	4.5	5.5	3R
700	22	28	34	43	53	78	2.1	3.5	4.9	6.3	7.7	3S

## 3-strand resistors with upgraded end step starting with size 4

The end step can take on 1.4 times the current

WE	100%	60%	40%	25%	15%	5%	0	2	4 3x	6 3x	8 3x	④⑤
4.7/9	200	255	305	390	480	710	-	-	0.055	0.07	0.09	4C
6.5/12.5	170	215	260	330	410	600	-	-	0.075	0.1	0.12	4D
9/17.5	140	180	220	275	335	510	-	-	0.1	0.14	0.17	4E
12.5/24	120	155	185	235	290	430	-	-	0.15	0.19	0.24	4F
17.5/34	100	130	160	195	240	365	-	-	0.2	0.27	0.34	4G
24/47	86	110	135	168	205	305	-	-	0.28	0.38	0.47	4H
34/65	73	95	115	143	175	260	-	-	0.4	0.52	0.65	4J
47/90	63	82	100	124	150	225	-	-	0.55	0.72	0.9	4K
65/125	53	70	85	105	127	190	-	-	0.75	1.0	1.25	4L
90/175	45	60	70	88	108	160	-	-	1.05	1.4	1.75	4M
125/240	38	50	60	74	91	135	-	-	1.95	1.9	2.4	4N
175/360	31	39	48	60	74	110	-	-	2.2	2.9	3.6	4P
240/500	26	33	40	51	63	90	-	-	3.0	4.0	5.0	4R
360/700	22	28	34	43	53	78	-	-	4.2	5.6	7.0	4S

<sup>1)</sup> For individual installation, the current values can be multiplied by 1.2 and for 2 stacked boxes by 1.1

**Starter resistors**

**Order data**

for first-time order:

Complete order number and in addition:

- motor rating
- for AC motors:
  - Rotor standstill voltage
  - Rated rotor current
- for DC motors:
  - Rated voltage
  - Rated current
- starting load factor
- number of starting steps
- application
- load torque
- moment of inertia
- speed

for re-order:

Complete order number and in addition  
- serial no. of the unit already supplied

Admissible operating values					Resistor data							
Rotor standstill voltage for AC motors <b>max.3000 V</b>												
or rated voltage for DC motors: <b>max.1800 V</b>												
Motor rating for starting load factor f =					Starter energy kJ	Starting time s	Starting frequency 1/h	Max. no. of steps for		No. of boxes	Order No. 3PR3 . ③ . . . . .	Weight IP00 ca. kg
2.0 kW	1.4 kW	1.0 kW	0.7 kW	AC				DC				
30	40	60	80	1200	20	10	2	8	1	3PR300③-9WA0	28	
45	60	90	120	2250	25	10	3	10	1	3PR320③-9WA0	35	
65	90	130	180	3200	25	10	5	15	1	3PR340③-9WA0	44	
80	110	160	220	4100	25	10	7	20	1	3PR360③-9WA0	51	
100	140	200	280	5250	25	10	8	20	1	3PR380③-9WA0	61	
115	160	230	320	7100	30	10	10	20	2	3PR340③-9WA1	88	
135	190	270	380	8900	33	10	10	20	2	3PR360③-9WA1	102	
170	240	340	480	11200	33	10	10	20	2	3PR380③-9WA1	122	
210	300	420	600	17700	25	10	10	20	3	3PR380③-9WA2	183	
280	400	560	800	23000	25	10	10	20	4	3PR380③-9WA3	244	
350	500	700	1000	28800	25	10	10	20	5	3PR380③-9WA4	305	
420	600	840	1200	35500	25	10	10	20	6	3PR380③-9WA5	366	
500	700	1000	1400	46500	45	10	10	20	8	3PR380③-9WA7	488	
570	800	1140	1600	53200	45	10	10	20	9	3PR380③-9WA8	549	
630	900	1260	1800	58500	45	10	10	20	10	3PR380③-9WB0	610	
700	1000	1400	2000	64300	45	10	10	20	11	3PR380③-9WB1	671	

③ supplement with the corresponding protection class (cf. type key)

**Slip resistors**

Motor rating in kW  
for speed reduction in %

3-strand resistors

Size	5%	10%	15%	25%
0	56	29	20	11
2	98	49	32	20
4	135	67	46	27
6	175	88	56	32
8	220	110	67	42

1-strand resistors

Size	5%	10%	15%	25%
0	77	36	25	15
2	120	56	37	23
4	160	77	53	31
6	196	98	63	36
8	240	120	78	74

**Control resistors**

**Order data**

for first-time order:

- Complete order number and in addition:
- motor rating
  - power requirement at highest speed
  - speed reduction in %
  - torque characteristic (const., linear, square-law)
  - for AC motors:
    - Rotor standstill voltage
    - Rotor rated voltage
  - for DC motors:
    - Rated voltage
    - Rated current
  - starting load factor f
  - number of starting steps
  - application
  - load torque
  - moment of inertia
  - speed

for re-order:

- Complete order number and in addition
- serial no. of the unit already supplied

**Admissible operating values**

Rotor standstill voltage for AC motors: **max.3000 V**

Rated voltage for AC motors: **max.1800 V**

Actual currency required in kW at highest speed and						Installation	No. of boxes	Order No. 3PR3 . ③ . - . . . .	Weight IP00 ca. kg
Speed reduction at constant load torque			Speed reduction at square-law rising load torque						
25%	50%	75%	25%	50%	75%				
kW	kW	kW	KW	kW	kW				
21	14	10	24	-	-	Individual Installation	1	3PR340 ③-9WA0	44
34	23	17	43	-	-		1	3PR360 ③-9WA0	51
43	29	21	50	36	29		1	3PR380 ③-9WA0	61
50	35	25	56	40	32	max. 2 stacked boxes	2	3PR340 ③-9WA1	88
60	40	30	68	50	40		2	3PR360 ③-9WA1	102
75	50	37	80	60	50		2	3PR380 ③-9WA1	122
72	48	36	83	60	49	max. 3 stacked boxes 1)	3	3PR360 ③-9WA2	153
90	60	45	105	75	60		3	3PR380 ③-9WA2	183
120	80	60	140	100	80		4	3PR380 ③-9WA3	244
150	100	75	175	125	100		5	3PR380 ③-9WA4	305
180	120	90	210	150	120		6	3PR380 ③-9WA5	366
210	140	105	245	175	140		7	3PR380 ③-9WA6	427
270	180	135	315	225	180		9	3PR380 ③-9WA8	549
300	200	150	350	250	200		10	3PR380 ③-9WB0	610
360	240	180	420	300	240		12	3PR380 ③-9WB2	732
450	300	230	490	375	300		15	3PR380 ③-9WB5	915
540	360	270	630	450	360	18	3PR380 ③-9WB8	1098	
720	480	360	840	600	480	24	3PR380 ③-9WC5	1464	
900	500	450	1050	750	600	30	3PR380 ③-9WD2	1830	
1080	720	540	1260	900	720	36	3PR380 ③-9WD8	2200	

③ supplement protection class (cf. type key)

1) for 2 stacked boxes, load reduction 18%, for 3 stacked boxes load reduction 30%

**Kits**

**to upgrade the protection class**

The units in the tables above can be supplied and/or adjusted to protection classes IP10, IP20, sizes 6 and 8 also to IP13, and size 8 to IP23.

When ordering the upgrade together with the basic resistor, the units will be supplied completely assembled.

When ordering the kits at a later date, installation must be done by the customer.

The kits must be selected in consideration of the type, installation and the number of boxes.

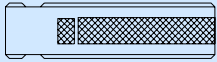
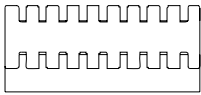
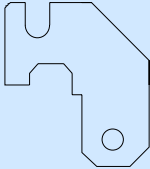
Example for ordering:

for a resistor 3PR3801- consisting of 7 boxes, upgrade to protection class IP23 for installation with 2 x 3 and 1 x 1 unit, 2 kits 3 x stacked and 1 kit for individual installation must be ordered.

Resistor type	Individual installation		2 stacked boxes		3 stacked boxes	
	Order no.	Weight ca. kg	Order no.	Weight ca. kg	Order no.	Weight ca. kg
<b>Kit for protection class IP 10</b> consisting of cover and side grids						
3PR3 00	3PX6 223-0A	1.2	3PX6 223-0B	1.8	3PX6 223-0C	2.4
3PR3 20	3PX6 223-2A	1.4	3PX6 223-2B	2.1	3PX6 223-2C	2.9
3PR3 40	3PX6 223-4A	1.6	3PX6 223-4B	2.5	3PX6 223-4C	3.4
3PR3 60	3PX6 223-6A	2.0	3PX6 223-6B	3.0	3PX6 223-6C	4.1
3PR3 80	3PX6 223-8A	2.4	3PX6 223-8B	3.4	3PX6 223-8C	4.6
<b>Kit for protection class IP13</b> consisting of a single-piece housing and side panels						
3PR3 60	3PX6 224-6A	9.6	3PX6 224-6B	13.5	3PX6 224-6C	17.4
3PR3 80	3PX6 224-8A	10.6	3PX6 224-8B	15.3	3PX6 224-8C	25.0
<b>Kit for protection class IP20</b> consisting of cover and side grids and bottom plate						
3PR3 00	3PX6 226-0A	2.6	3PX6 226-0B	3.9	3PX6 226-0C	5.0
3PR3 20	3PX6 226-2A	3.3	3PX6 226-2B	4.9	3PX6 226-2C	6.5
3PR3 40	3PX6 226-4A	4.2	3PX6 226-4B	6.3	3PX6 226-4C	8.2
3PR3 60	3PX6 226-6A	5.0	3PX6 226-6B	7.6	3PX6 226-6C	10.0
3PR3 80	3PX6 226-8A	5.8	3PX6 226-8B	8.5	3PX6 226-8C	11.5
<b>Kit for protection class IP23</b> consisting of terminal box and side panels						
3PR3 80	3PX6 225-8A	14.6	3PX6 225-8B	19.6	3PX6 225-8C	30

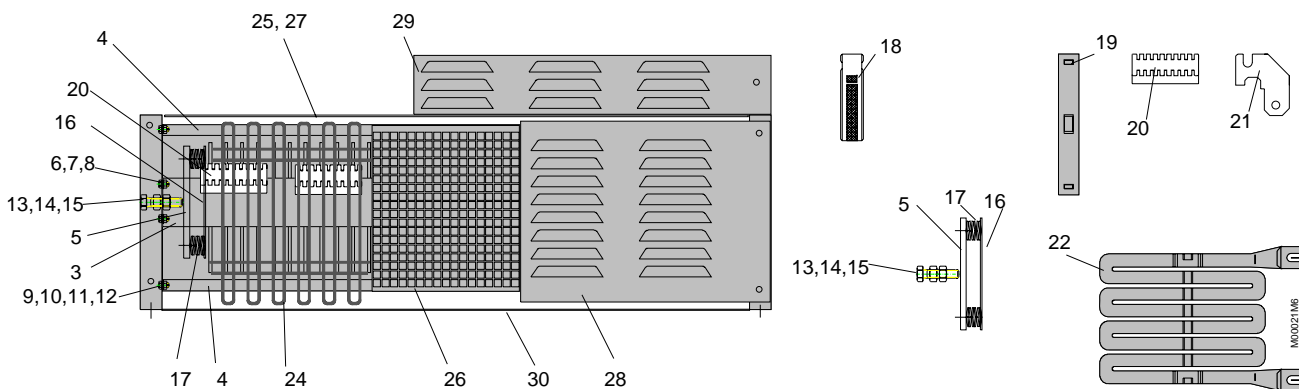
**Accessories and spare parts**

For resistors 3PR3.. and cast iron elements 3PY6 ..

Description	Remark	Order no.	Weight Ca. kg
Connection kit	Each kit: 3 ceramic holders 6 connecting pieces 2 connecting bolts M10	3PY6 204 – 1A	1.1
Ceramic Spacer	 2 pcs. required per element	3PY6 203 – 0A	0.11
Ceramic holder for connecting pieces		3PY6 204 – 1C	0.19
Connecting piece with bolt M12		3PY6 204 – 1D	0.15
Filler compound, 1 bag, 1 kg	Mix 600 g with 75 g of water to a low viscous compound and process immediately. Pot life ca. 30 min Resistor elements WE 125 .. WE 700 are fixed with compound between the ceramic spacers. When ordering these elements for the first time, always order the necessary amount of compound. Amounts required: 3PR3 00 - 0.6 kg 3PR3 20 - 0.8 kg 3PR3 40 - 0.8 kg 3PR3 60 - 1.0 kg 3PR3 80 - 1.2 kg	3PX6 206 – 0A	1.0

Item	Description	Order no.
1	Side panel, left	GSM115
2	Side panel, right	GSM116
<b>3</b>	<b>Mounting rail</b>	
3.1	341 mm for 3PR30	GSM059
3.2	461 mm for 3PR32	GSM060
3.3	581 mm for 3PR34	GSM061
3.4	696 mm for 3PR36	GSM062
3.5	811 mm for 3PR38	GSM063
<b>4</b>	<b>Guide rail</b>	
4.1	341 mm for 3PR30	GSM117
4.2	461 mm for 3PR32	GSM118
4.3	581 mm for 3PR34	GSM119
4.4	696 mm for 3PR36	GSM120
4.5	811 mm for 3PR38	GSM121
5	Clamping member A600 717	
6	Hex.nut DIN 933-M6x16	NSS933-0064
7	Spring washer DIN 137.B6	NSF137-0041
8	Hex.nut DIN 934.M8	NMS934-0041
9	Hex.bolt DIN 933-M8x20	NSS933-0095
10	Disk DIN 125-A8,4	NSS125-0053
11	Serrated lock washer DIN 6796-A8,4	NSZ6797-0031
12	Hex.nut DIN 934-M8	NMS934-0051
13	Hex.bolt DIN 933-M10x55	NSS933-0064
14	Hex.nut DIN 934-M10 (2x)	NMS934-0061
15	Spring washer DIN 137-B10	NSF137-0061
16	Holder A640 727	
17	Spring washer DIN 2093-34x16.3x1.5	
18	Ceramic spacer	3PY6 203-0A
19	Shim	GSZ009
20	Ceramic holder	3PY6 204-1C
21	Connecting piece with bolt	3PY6 204-1D
22	Cast iron element	3PY6 201-...
23	Spacer tube DIN 2440-3/8"x 80	
<b>24</b>	<b>Cover grids, IP10 for</b>	
24.1	3PR30	A 640 616
24.2	3PR32	A 640 615
24.3	3PR34	A 640 614
24.4	3PR36	A 640 613
24.5	3PR38	A 640 612

Item	Description	Order no.
<b>25</b>	<b>Cover grid, top, IP10 for</b>	
25.1	3PR30	A 640 620
25.2	3PR32	A 640 619
25.3	3PR34	A 640 618
25.4	3PR36	A 640 617
25.5	3PR38	A 640 611
<b>26</b>	<b>Perforated plate, IP20 for</b>	
26.1	3PR30	B 600 423
26.2	3PR32	B 600 425
26.3	3PR34	B 600 404
26.4	3PR36	B 600 405
26.5	3PR38	B 600 407
<b>27</b>	<b>Perforated plate, top, IP 20 for</b>	
27.1	3PR30	A 600 422
27.2	3PR32	A 600 424
27.3	3PR34	A 600368
27.4	3PR36	A 600 369
27.5	3PR38	A 600 370
<b>28</b>	<b>Slotted plate, IP13/23 for</b>	
28.1	3PR36	A 600 502
28.2	3PR38	A 600 500
<b>29</b>	<b>Cover, IP13/23, for</b>	
29.1	3PR36	A 600 503
29.2	3PR38	A 600 501
<b>30</b>	<b>Bottom plate, perforated, IP20/23</b>	
30.1	3PR30	A 600 522
30.2	3PR32	A 600 521
30.3	3PR34	A 600 520
30.4	3PR36	A 600 519
30.5	3PR38	A 600 486
<b>w/o pic.</b>	<b>Cable bushing for IP20/23</b>	
	3PR30	A 600 526
	3PR32	A 600 525
	3PR34	A 600 524
	3PR36	A 600 523
	3PR38	B 600 375
<b>w/o pic.</b>	<b>Compound 1 kg</b>	3PX6 206 - 0A

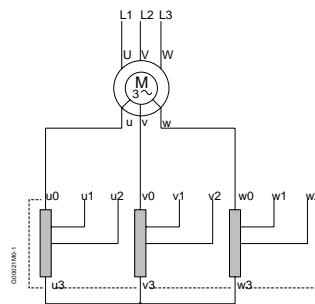


**Typical circuit**

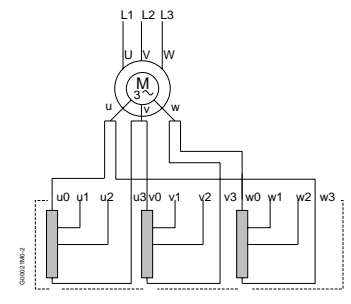
Three-strand resistors with 3 symmetrical resistor steps:

1 <sup>st</sup> step	2 <sup>nd</sup> step	3 <sup>rd</sup> step	
U <sub>0</sub> -U <sub>1</sub>	U <sub>1</sub> -U <sub>2</sub>	U <sub>2</sub> -0	U <sub>2</sub> -U <sub>3</sub>
V <sub>0</sub> -V <sub>1</sub>	V <sub>1</sub> -V <sub>2</sub>	V <sub>2</sub> -0	V <sub>2</sub> -V <sub>3</sub>
W <sub>0</sub> -W <sub>1</sub>	W <sub>1</sub> -W <sub>2</sub>	W <sub>2</sub> -0	W <sub>2</sub> -W <sub>3</sub>

In the case of a starter with switch or contactor contacts, the end contacts and/or contacts of the end step contactor connect the sliprings of the motor u-v-w (pursuant to DIN 42400: K-L-M).



Y connection



Delta connection

**Terminal markings**

Marking of the terminals and corresponding proportionate values of the overall resistance

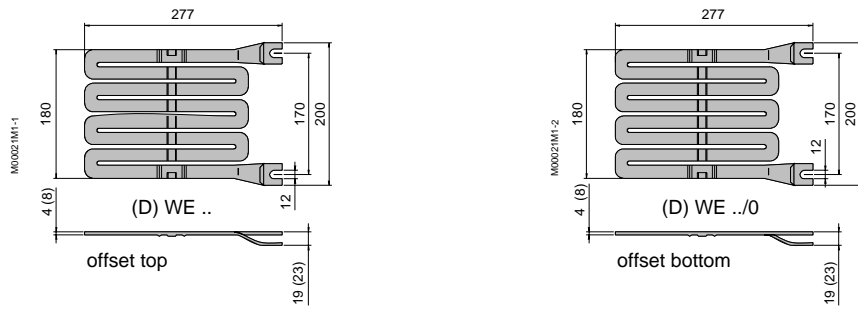
**Single-strand**

3PR3 0	Terminal markings Prop. values in % of the overall resistance	G00021M0-3
		0 1 2 3 4 5 7 9 11 13 0 7,7 15 23 31 38 54 69 85 100%
3PR3 2	Terminal markings Prop. values in % of the overall resistance	G00021M0-2
		0 1 2 3 4 5 7 9 11 15 19 0 5,2 10,5 16 21 26 37 47 58 79 100%
3PR3 4	Terminal markings Prop. values in % of the overall resistance	G00021M0-1
		0 1 2 3 4 5 7 9 11 13 17 21 25 0 4 8 12 16 20 28 36 44 52 68 84 100%
3PR3 6	Terminal markings Prop. values in % of the overall resistance	G00021M0-0
		0 1 2 3 4 5 7 9 11 13 15 17 19 23 27 31 0 3,2 6,5 10 13 16 23 29 35 42 48 55 61 74 87 100%
3PR3 8	Terminal markings Prop. values in % of the overall resistance	G00021M0-0
		0 1 2 3 4 5 7 9 11 13 15 17 19 21 25 29 33 37 0 2,7 5,4 8 11 13,5 19 24 30 35 40 46 52 57 68 78 89 100%

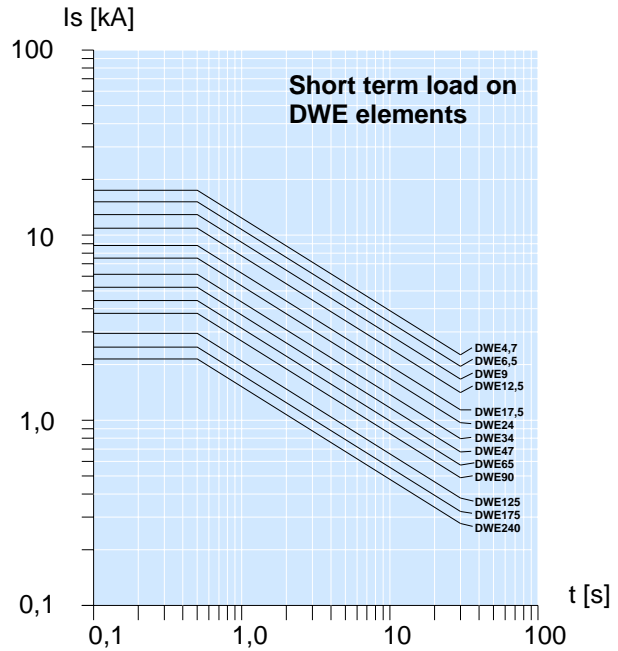
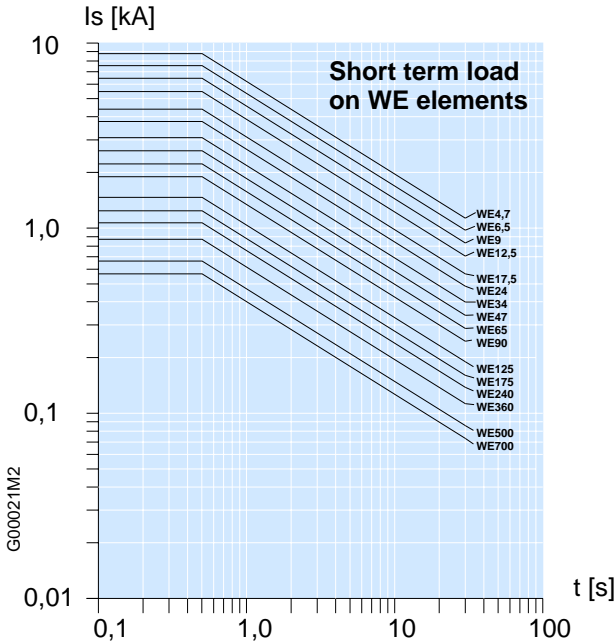
**Three-strand**

3PR3 0	Terminal markings Prop. values in % of the overall resistance	G00021M0-4
		0 1 2 3 0 33 66 100%
3PR3 2	Terminal markings Prop. values in % of the overall resistance	G00021M0-3
		0 1 2 3 5 0 20 40 60 100%
3PR3 4	Terminal markings Prop. values in % of the overall resistance	G00021M0-2
		0 1 2 3 5 7 0 14 28 43 71 100%
3PR3 6	Terminal markings Prop. values in % of the overall resistance	G00021M0-1
		0 1 2 3 5 7 9 0 11 22 33 55 78 100%
3PR3 8	Terminal markings Prop. values in % of the overall resistance	G00021M0-0
		0 1 2 3 5 7 9 11 0 9 18 27 45 64 82 100%

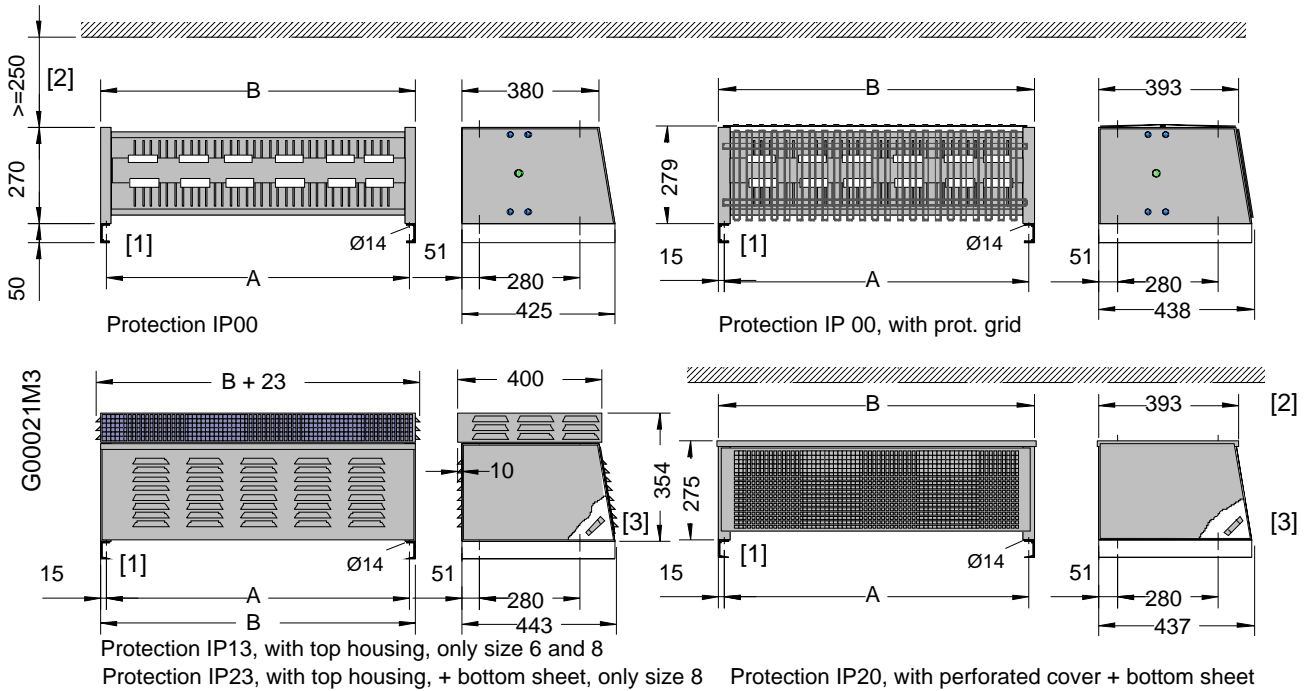




Cast iron elements WE, WE/0



Short-term loads acting on cast iron elements

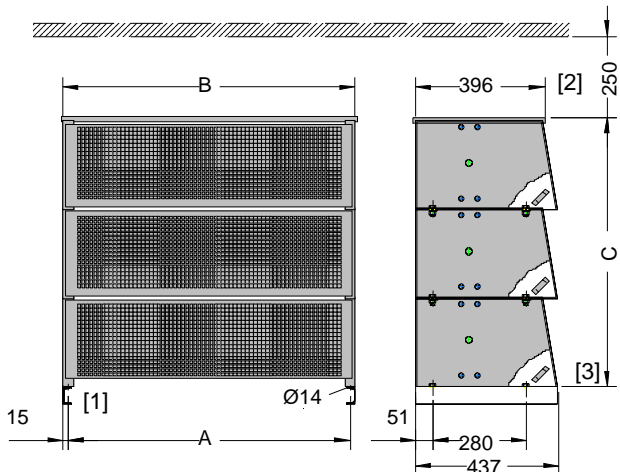
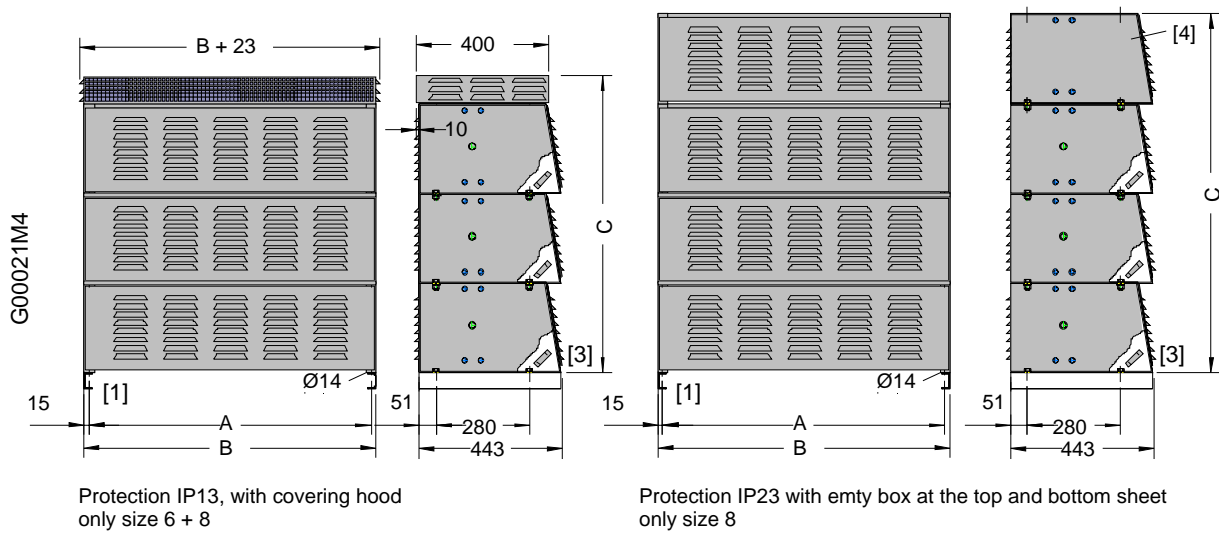
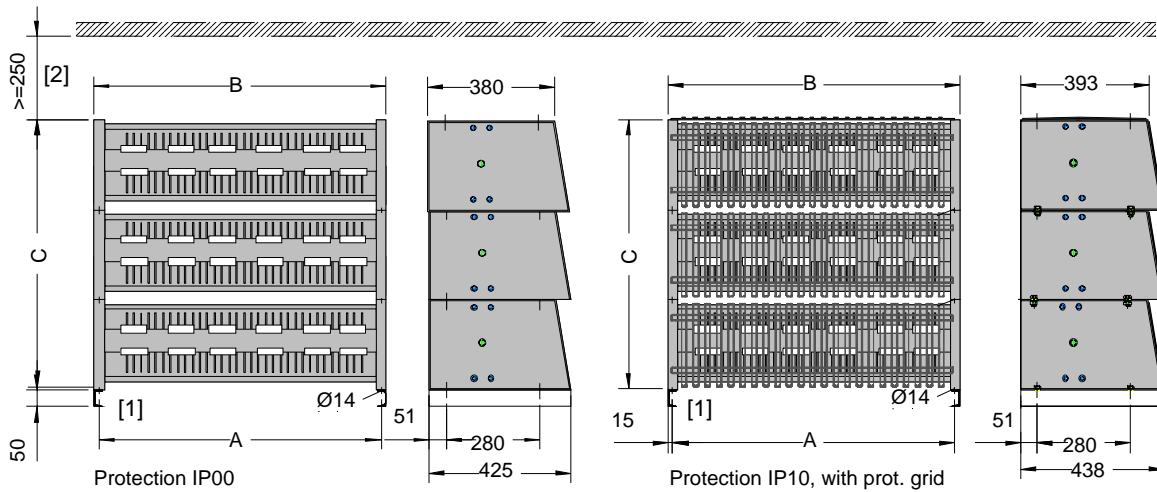


Resistors 3PR3 for individual installation

Widths		
Type	A	B
3PR30	375	405
3PR32	495	525
3PR34	615	645
3PR36	730	760
3PR38	845	875

Weights ca kg					
Type	IP00	IP10	IP20	IP13	IP23
3PR30	28	29	31	-	-
3PR32	35	36	38	-	-
3PR34	44	46	48	-	-
3PR36	51	53	56	61	-
3PR38	61	63	67	72	76

- [1] Bottom clearance  $\geq 50$  mm
- [2] Top clearance minimum 250 mm
- [3] Cable bushing  
only for protection classes IP 20 and IP 23



Type	Weight ca. kg				
	IP00	IP10	IP20	IP13	IP23
2/3PR30..	56	58	60	-	-
2/3PR32..	70	72	75	-	-
2/3PR34..	88	91	94	-	-
2/3PR36..	102	105	110	116	-
2/3PR38..	122	125	131	137	142
3/3PR30..	84	86	89	-	-
3/3PR32..	105	108	112	-	-
3/3PR34..	132	135	140	-	-
3/3PR36..	153	157	163	170	-
3/3PR38..	183	188	195	208	213

Protection IP20, with perforated top and bottom sheet

Cast iron resistors for stacked installation

Widths mm		
Type	A	B
3PR30	375	405
3PR32	495	525
3PR34	615	645
3PR36	730	760
3PR38	845	875

Dimension C mm for stacked installation		
Protection	2 boxes	3 boxes
IP 00	540	810
IP10	549	819
IP 13	623	893
IP 20	545	815
IP 23	812	1082

- [1] Bottom clearance  $\geq 50$  mm  
The hexagonal nuts required for fastening M12 x 25 are not included in the scope of supply.
- [2] Minimum spacing at the top  $\geq 250$  mm
- [3] Cable bushing  
for protection classes IP 20 and IP 23
- [4] Terminal box, without resistor