



WB1 EA

### References

For contactors (1)

Contactor	Type Size	CV1 F	CV3 F
Associated electromagnet		EB1 EA40	EB1 EA40

(1) The contactor electromagnet will be defined at the manufacturing stage, according to its utilisation category and composition.

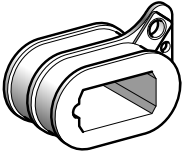
### Coils

Operating range				Coil		Number of turns	Inductance (L) closed circuit at Un max.	Reference	Weight
50 Hz		60 Hz		Resistance at 20 °C ±10 %	Wire diameter				
Un min.	Un max.	Un min.	Un max.						
V	V	V	V	Ω	mm	H		kg	
20	22	22	24	0.45	1	162	0.032	WB1 EA022	0.180
23	24	25	26	0.50	1	178	0.038	WB1 EA024	0.180
25	26	27	29	0.61	0.95	196	0.045	WB1 EA026	0.180
27	29	30	32	0.75	0.90	216	0.055	WB1 EA029	0.180
30	32	33	35	0.93	0.85	238	0.068	WB1 EA032	0.180
33	35	36	39	1.15	0.80	262	0.081	WB1 EA035	0.180
36	39	40	43	1.44	0.75	289	0.10	WB1 EA039	0.180
40	44	44	48	1.80	0.71	323	0.12	WB1 EA043	0.180
45	48	49	53	2.22	0.67	356	0.15	WB1 EA048	0.180
49	53	54	58	2.75	0.63	392	0.18	WB1 EA053	0.180
54	58	59	64	3.33	0.60	430	0.220	WB1 EA058	0.180
59	64	65	70	3.72	0.60	472	0.27	WB1 EA064	0.180
65	70	71	77	4.67	0.56	520	0.32	WB1 EA070	0.180
71	78	78	85	5.73	0.53	572	0.39	WB1 EA077	0.180
79	85	86	93	7.06	0.50	630	0.408	WB1 EA085	0.180
86	92	94	101	8.49	0.475	685	0.560	WB1 EA092	0.180
93	100	102	111	10.1	0.45	740	0.66	WB1 EA100	0.180
101	110	112	121	12.54	0.425	816	0.80	WB1 EA110	0.180
111	127	122	140	14.83	0.425	940	1.07	WB1 EA127	0.180
128	135	141	148	17.62	0.40	1000	1.2	WB1 EA135	0.180
136	149	149	164	21.9	0.375	1100	1.4	WB1 EA148	0.180
150	164	165	180	24.5	0.375	1210	1.7	WB1 EA163	0.180
165	183	181	201	33.6	0.335	1350	2.2	WB1 EA182	0.180
184	201	202	220	41.5	0.315	1480	2.6	WB1 EA200	0.180
202	221	221	242	50.4	0.30	1630	3.2	WB1 EA220	0.180
222	241	243	265	62.7	0.28	1780	3.8	WB1 EA240	0.180
242	266	266	291	70.3	0.28	1960	4.6	WB1 EA264	0.180
267	290	292	318	85.4	0.265	2140	5.6	WB1 EA290	0.180
291	318	319	346	103.9	0.25	2330	6.6	WB1 EA315	0.180
319	345	347	370	127.8	0.236	2560	7.9	WB1 EA345	0.180
346	364	371	387	148.6	0.224	2700	8.8	WB1 EA365	0.180
365	380	388	407	156.2	0.224	2817	9.6	WB1 EA380	0.180
381	400	408	440	182	0.212	2965	10	WB1 EA400	0.180
401	432	441	475	199.1	0.212	3200	12	WB1 EA432	0.180
433	455	476	500	233	0.20	3370	14	WB1 EA455	0.180
456	500	501	550	284	0.19	3710	16	WB1 EA500	0.180
501	550	-	-	347	0,180	4070	20	WB1 EA550	0.180

### Specifications

- Operating range: 0.85 to 1.1 Uc
- Coil supply transformer power: 100 VA

	Average consumption								Power factor cos φ	
	50 Hz				60 Hz				50 Hz	60 Hz
	Un min.		Un max.		Un min.		Un max.			
	VA	W	VA	W	VA	W	VA	W		
Inrush	220	90	270	110	225	75	275	95	0.40	0.34
Sealed	35	13	55	19	35	13	55	10	0.35	0.37



WB1 GA●

## References (continued)

For contactors (1)

Contactor	Type	CV1		CV3			
		Size		F	G	F	G
Associated electromagnet		EC1 EA40		EB1 GA40	EC1 EA40	EB1 GA40	EB1 GA40

(1) The contactor electromagnet will be defined at the manufacturing stage, according to its utilisation category and composition.

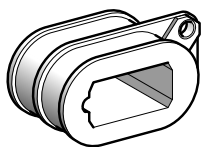
## Coils

Operating range				Coil	Resistance at 20 °C ±10 %	Wire diameter	Number of turns	Inductance (L) closed circuit at Un max.	Reference	Weight
50 Hz		60 Hz								
Un min.	Un max.	Un min.	Un max.							
V	V	V	V	Ω	mm		H		kg	
20	21	22	25	0.28	1.12	116	0.020	WB1 GA021	0.220	
22	24	26	27	0.40	1	132	0.026	WB1 GA024	0.220	
25	26	29	30	0.48	0.95	142	0.031	WB1 GA026	0.220	
27	29	31	33	0.60	0.90	160	0.038	WB1 GA029	0.220	
30	32	34	37	0.67	0.90	176	0.047	WB1 GA032	0.220	
33	36	38	41	0.83	0.85	194	0.056	WB1 GA035	0.220	
37	40	42	46	1.04	0.80	216	0.070	WB1 GA039	0.220	
41	44	47	51	1.19	0.80	242	0.088	WB1 GA044	0.220	
45	50	52	57	1.32	0.80	266	0.10	WB1 GA048	0.220	
51	55	58	64	1.87	0.71	300	0.13	WB1 GA054	0.220	
56	61	65	71	2.32	0.67	332	0.16	WB1 GA060	0.220	
62	69	72	80	2.92	0.63	370	0.20	WB1 GA067	0.220	
70	78	81	90	3.60	0.60	414	0.26	WB1 GA075	0.220	
79	88	91	101	4.17	0.60	470	0.33	WB1 GA085	0.220	
89	90	102	110	5.29	0.56	522	0.41	WB1 GA095	0.220	
91	97	111	112	5.95	0.53	532	0.403	WB1 GA097	0.220	
98	103	113	118	7.26	0.50	580	0.50	WB1 GA105	0.220	
104	111	119	128	7.66	0.50	608	0.55	WB1 GA110	0.220	
112	120	129	138	8.47	0.50	664	0.66	WB1 GA120	0.220	
121	130	139	149	11.09	0.45	716	0.77	WB1 GA130	0.220	
131	136	150	156	12.04	0.45	770	0.88	WB1 GA140	0.220	
137	149	157	171	12.65	0.45	804	0.96	WB1 GA145	0.220	
150	163	172	188	17.28	0.40	884	1.2	WB1 GA160	0.220	
164	176	189	202	19.20	0.40	970	1.4	WB1 GA175	0.220	
177	180	203	207	23.36	0.375	1044	1.6	WB1 GA190	0.220	
181	186	208	214	23.97	0.375	1068	1.7	WB1 GA195	0.220	
187	204	215	235	27.38	0.355	1104	1.8	WB1 GA200	0.220	
205	220	236	246	33.74	3.335	1214	2.2	WB1 GA220	0.220	
221	233	247	268	35.51	0.335	1270	2.4	WB1 GA230	0.220	
234	256	269	295	47.33	0.30	1380	2.8	WB1 GA250	0.220	
257	280	296	322	52.76	0.30	1520	3.5	WB1 GA275	0.220	
281	308	323	354	58.22	0.30	1658	4.1	WB1 GA300	0.220	
309	324	355	373	73.16	0.28	1824	5	WB1 GA330	0.220	
325	353	374	406	77.56	0.28	1920	5.4	WB1 GA345	0.220	
354	380	407	429	85.48	0.28	2090	6	WB1 GA380	0.220	
381	410	430	472	110.71	0.25	2210	7.3	WB1 GA400	0.220	
411	447	473	515	123.32	0.25	2430	8.9	WB1 GA440	0.220	
448	480	516	540	136.22	0.25	2650	10.6	WB1 GA480	0.220	
481	514	541	591	143.98	0.25	2780	11.5	WB1 GA500	0.220	
515	560	–	–	212.39	0.212	3040	14	WB1 GA550	0.220	
561	600	–	–	259.73	0.20	3320	16	WB1 GA600	0.220	

## Specifications

- Operating range: 0.85 to 1.1 Uc
- Coil supply transformer power: 160 VA

	Average consumption								Power factor cos φ	
	50 Hz				60 Hz				50 Hz	60 Hz
	Un min.		Un max.		Un min.		Un max.			
	VA	W	VA	W	VA	W	VA	W		
Inrush	345	130	415	160	370	130	475	165	0.38	0.35
Sealed	45	16	65	25	50	19	75	30	0.35	0.37



WB1 HA●

## References (continued)

For contactors (1)

Contactor	Type		CV1		CV3		
	Size		G	H	G, J	H	K (2 poles)
Associated electromagnet			EC1 GA40	EB1 HA40	EC1 GA40	EB1 HA40	EB1 HA40

(1) The contactor electromagnet will be defined at the manufacturing stage, according to its utilisation category and composition.

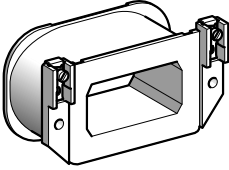
## Coils

Operating range				Coil Resistance at 20 °C ±10 %	Wire diameter	Number of turns	Inductance (L) closed circuit at Un max.	Reference	Weight
50 Hz		60 Hz							
Un min.	Un max.	Un min.	Un max.						
V	V	V	V	Ω	mm		H		kg
21	22	24	25	0.21	1.25	95	0.018	WB1 HA022	0.280
23	24	26	27	0.26	1.18	104	0.021	WB1 HA024	0.280
25	26	28	29	0.29	1.18	114	0.025	WB1 HA026	0.280
27	29	30	32	0.35	1.120	122	0.031	WB1 HA029	0.280
30	32	33	36	0.39	1.120	136	0.037	WB1 HA032	0.280
33	36	37	41	0.55	1	152	0.045	WB1 HA035	0.280
37	40	42	46	0.62	1	170	0.056	WB1 HA039	0.280
41	44	47	50	0.77	0.95	190	0.071	WB1 HA044	0.280
45	49	51	56	0.94	0.90	208	0.085	WB1 HA048	0.280
50	55	57	63	1.06	0.90	232	0.10	WB1 HA054	0.280
56	61	64	70	1.34	0.85	260	0.13	WB1 HA060	0.280
62	68	71	78	1.68	0.80	290	0.16	WB1 HA067	0.280
69	76	79	86	2.12	0.75	322	0.20	WB1 HA075	0.280
77	82	87	93	2.61	0.71	356	0.24	WB1 HA082	0.280
83	88	94	100	3.11	0.67	380	0.28	WB1 HA088	0.280
89	95	101	106	3.37	0.67	408	0.33	WB1 HA095	0.280
96	97	107	110	3.46	0.67	418	0.34	WB1 HA097	0.280
98	100	111	115	4	0.63	432	0.37	WB1 HA100	0.280
102	111	116	126	4.84	0.60	474	0.44	WB1 HA110	0.280
112	120	127	137	5.35	0.60	518	0.53	WB1 HA120	0.280
121	133	138	151	7.27	0.53	560	0.62	WB1 HA130	0.280
134	147	152	169	8.23	0.53	626	0.77	WB1 HA145	0.280
148	162	170	184	10.24	0.50	694	0.94	WB1 HA160	0.280
161	175	185	200	11.24	0.50	754	1.1	WB1 HA175	0.280
176	190	201	215	13.56	0.475	822	1.3	WB1 HA190	0.280
196	200	216	230	15.77	0.405	864	1.5	WB1 HA200	0.280
201	220	231	250	17.55	0.405	950	1.8	WB1 HA220	0.280
221	230	251	264	22.72	0.400	994	1.9	WB1 HA230	0.280
231	250	265	290	24.93	0.400	1080	2.3	WB1 HA250	0.280
251	275	291	317	27.81	0.400	1190	2.8	WB1 HA275	0.280
276	300	318	348	34.42	0.375	1300	3.3	WB1 HA300	0.280
301	330	349	375	41.99	0.355	1424	4	WB1 HA330	0.280
341	345	376	392	48.94	0.335	1490	4.4	WB1 HA345	0.280
346	365	393	412	51.68	0.335	1564	4.9	WB1 HA365	0.280
366	380	413	432	54.52	0.335	1640	5.3	WB1 HA380	0.280
381	400	433	465	64.52	0.315	1730	5.9	WB1 HA400	0.280
401	440	466	506	78.1	0.300	1900	7.1	WB1 HA440	0.280
441	480	507	545	86.03	0.300	2070	8.5	WB1 HA480	0.280
481	500	546	580	101.9	0.280	2160	9.2	WB1 HA500	0.280
501	550	581	600	113.3	0.280	2374	11.1	WB1 HA550	0.280
551	564	-	-	129.3	0.265	2450	11.7	WB1 HA567	0.280
565	600	-	-	153.8	0.250	2610	13.2	WB1 HA600	0.280

## Specifications

- Operating range: 0.85 to 1.1 Uc
- Coil supply transformer power: 250 VA

	Average consumption								Power factor cos φ	
	50 Hz				60 Hz				50 Hz	60 Hz
	Un min.		Un max.		Un min.		Un max.			
	VA	W	VA	W	VA	W	VA	W		
Inrush	500	155	615	190	560	170	675	200	0.31	0.30
Sealed	60	22	85	35	65	25	95	40	0.38	0.39



WB1 JB●

## References (continued)

For contactors (1)

Contactor	Type Size	CV1		CV3	
		H	J	H	K
Associated electromagnet		EC1 HB40	EB1 JB40	EC1 HB40	EC1 HB40

(1) The contactor electromagnet will be defined at the manufacturing stage, according to its utilisation category and composition.

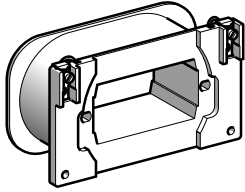
## Coils

Operating range				Coil Resistance at 20 °C ±10 %	Wire diameter	Number of turns	Inductance (L) closed circuit at Un max.	Reference	Weight
50 Hz		60 Hz							
Un min.	Un max.	Un min.	Un max.						
V	V	V	V	Ω	mm		H		kg
22	24	28	30	0.08	2	80	0.016	WB1 JB310	0.560
25	26	31	33	0.10	1.9	87	0.019	WB1 JB311	0.560
27	29	34	36	0.11	1.9	97	0.024	WB1 JB312	0.560
30	32	37	40	0.14	1.8	107	0.029	WB1 JB313	0.560
33	35	41	43	1.17	1.7	117	0.034	WB1 JB314	0.560
36	39	44	49	0.21	1.6	130	0.043	WB1 JB315	0.560
40	44	49	54	0.24	1.6	147	0.055	WB1 JB316	0.560
45	49	55	60	0.30	1.5	160	0.065	WB1 JB317	0.560
49	54	61	67	0.39	1.4	180	0.083	WB1 JB318	0.560
55	61	68	75	0.48	1.32	200	0.10	WB1 JB319	0.560
62	68	76	84	0.60	1.25	223	0.13	WB1 JB320	0.560
68	75	84	93	0.76	1.18	250	0.16	WB1 JB321	0.560
76	82	94	101	0.92	1.12	273	0.19	WB1 JB322	0.560
83	87	102	107	1.02	1.12	298	0.21	WB1 JB350	0.560
88	92	108	117	1.19	1.06	315	0.25	WB1 JB323	0.560
93	100	118	123	1.27	1.06	333	0.28	WB1 JB325	0.560
101	110	124	135	1.56	1	365	0.34	WB1 JB326	0.560
111	120	136	147	1.90	0.95	400	0.401	WB1 JB327	0.560
121	131	148	162	2.26	0.9	430	0.408	WB1 JB328	0.560
132	145	163	180	2.83	0.85	480	0.60	WB1 JB329	0.560
146	160	181	196	3.17	0.85	530	0.73	WB1 JB330	0.560
161	175	196	215	3.90	0.8	580	0.87	WB1 JB331	0.560
176	190	216	235	4.84	0.75	635	1.02	WB1 JB332	0.560
191	202	236	250	5.15	0.75	670	1.14	WB1 JB334	0.560
201	220	251	272	6.29	0.71	735	1.37	WB1 JB335	0.560
221	230	273	283	7.27	0.67	765	1.50	WB1 JB336	0.560
231	252	284	310	7.99	0.67	830	1.77	WB1 JB337	0.560
253	276	311	340	9.93	0.63	915	2.15	WB1 JB338	0.560
277	304	341	374	11.95	0.6	1000	2.55	WB1 JB339	0.560
305	330	375	405	15	0.560	1100	3.09	WB1 JB340	0.560
331	349	406	430	15.79	0.560	1150	3.38	WB1 JB341	0.560
350	380	431	456	19.37	0.53	1265	4.10	WB1 JB342	0.560
381	405	457	497	22.76	0.5	1335	4.54	WB1 JB343	0.560
406	442	498	544	27.65	0.4075	1465	5.50	WB1 JB344	0.560
443	480	545	589	30.60	0.4075	1600	6.54	WB1 JB345	0.560
481	506	590	616	35.13	0.405	1665	7.10	WB1 JB346	0.560
507	553	-	-	43.18	0.4025	1830	8.59	WB1 JB347	0.560
554	600	-	-	53.04	0.40	2000	10.2	WB1 JB348	0.560

## Specifications

- Operating range: 0.85 to 1.1 Uc
- Coil supply transformer power: 400 VA

	Average consumption								Power factor cos φ	
	50 Hz				60 Hz				50 Hz	60 Hz
	Un min.		Un max.		Un min.		Un max.			
	VA	W	VA	W	VA	W	VA	W		
Inrush	700	120	840	145	915	140	1100	165	0.17	0.15
Sealed	80	28	110	45	115	41	170	65	0.38	0.38



WB1 KB●

### References (continued)

For contactors (1)

Contactor	Type		CV1		
	Size		J	K	L (2 poles)
Associated electromagnet	EC1 JB40		EB1 KB40	EB1 KB40	EB1 KB40

(1) The contactor electromagnet will be defined at the manufacturing stage, according to its utilisation category and composition.

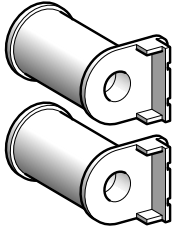
### Coils

Operating range				Coil						Reference	Weight
50 Hz		60 Hz		Resistance at 20 °C ±10 %	Wire diameter	Number of turns	Inductance (L) closed circuit at Un max.	Reference	Weight		
Un min.	Un max.	Un min.	Un max.							Ω	mm
100	109	115	124	0.37	1.7	165	0.147	WB1 KB169	1.120		
110	124	125	141	0.46	1.6	180	0.175	WB1 KB151	1.120		
125	142	142	161	0.59	1.5	205	0.228	WB1 KB166	1.120		
143	161	162	183	0.77	1.40	234	0.297	WB1 KB165	1.120		
162	182	184	208	0.99	1.32	266	0.383	WB1 KB164	1.120		
183	199	209	225	1.14	1.32	300	0.487	WB1 KB163	1.120		
200	219	226	250	1.37	1.25	325	0.580	WB1 KB162	1.120		
220	249	251	284	1.87	1.12	360	0.700	WB1 KB154	1.120		
250	277	285	317	2.38	1.06	410	0.910	WB1 KB153	1.120		
278	304	318	347	2.97	1	455	1.12	WB1 KB152	1.120		
305	341	348	389	3.30	1	500	1.35	WB1 KB141	1.120		
342	379	390	430	4.11	0.95	560	1.70	WB1 KB142	1.120		
380	399	431	455	5.06	0.90	620	2.10	WB1 KB155	1.120		
400	439	456	500	5.95	0.85	655	2.32	WB1 KB132	1.120		
440	499	501	566	7.35	0.80	720	2.80	WB1 KB123	1.120		
500	549	567	625	9.54	0.75	820	3.63	WB1 KB133	1.120		
550	648	–	–	11.66	0.71	900	4.40	WB1 KB121	1.120		

### Specifications

- Operating range: 0.85 to 1.1 Uc
- Coil supply transformer power: 800 VA

	Average consumption								Power factor cos φ	
	50 Hz				60 Hz				50 Hz	60 Hz
	Un min.		Un max.		Un min.		Un max.			
	VA	W	VA	W	VA	W	VA	W		
Inrush	2300	320	3060	430	2350	280	2750	330	0.14	0.12
Sealed	205	65	385	140	205	70	330	120	0.36	0.36



WB2 EA

## References (continued)

## For contactors

Contactor	Type Size	CV1		CV3		
		F	G	F	G	J (2 poles)
Associated electromagnet		EK1 EA40	EK1 GA40	EK1 EA40	EK1 GA40	EK1 GA40

## Coils

Operating range				Coil (unit characteristics) (1)						
Coils 20 to 26 W (2)		Coils 26 to 37 W (2)		Resistance at 20 °C ±10 %	Wire diameter	Number of turns	Ref. code	Reference	Weight	
Un min.	Un max.	Un min.	Un max.							
V	V	V	V	Ω	mm				kg	
-	-	12	13	2.7	0.80	630	800EA2	WB2 EA800	0.400	
12	-	14	15	3.5	0.75	722	750EA2	WB2 EA750	0.400	
13	-	16	-	4.3	0.71	790	710EA2	WB2 EA710	0.400	
14	15	17	19	5.4	0.67	892	670EA2	WB2 EA670	0.400	
16	17	20	21	6.8	0.63	1000	630EA2	WB2 EA630	0.400	
18	19	22	24	8.4	0.60	1110	600EA2	WB2 EA600	0.400	
20	22	25	27	11	0.56	1280	560EA2	WB2 EA560	0.400	
23	24	28	30	13.5	0.53	1400	530EA2	WB2 EA530	0.400	
25	27	31	33	17	0.50	1550	500EA2	WB2 EA500	0.400	
28	30	34	37	21	0.4075	1720	475EA2	WB2 EA475	0.400	
31	34	38	42	25	0.405	1880	450EA2	WB2 EA450	0.400	
35	38	43	47	32	0.4025	2130	425EA2	WB2 EA425	0.400	
39	44	48	53	40	0.40	2360	400EA2	WB2 EA400	0.400	
45	49	54	60	52	0.375	2700	375EA2	WB2 EA375	0.400	
50	55	61	67	65	0.355	3000	355EA2	WB2 EA355	0.400	
56	62	68	76	80	0.335	3340	335EA2	WB2 EA335	0.400	
63	68	77	84	102	0.315	3750	315EA2	WB2 EA315	0.400	
69	79	85	96	124	0.30	4130	300EA2	WB2 EA300	0.400	
80	88	97	108	162	0.28	4670	280EA2	WB2 EA280	0.400	
89	98	109	120	202	0.265	5240	265EA2	WB2 EA265	0.400	
99	111	121	136	247	0.25	5700	250EA2	WB2 EA250	0.400	
112	124	137	151	318	0.236	6510	236EA2	WB2 EA236	0.400	
125	138	152	169	394	0.224	7300	224EA2	WB2 EA224	0.400	
139	155	170	189	482	0.212	8030	212EA2	WB2 EA212	0.400	
156	172	190	210	600	0.20	8900	200EA2	WB2 EA200	0.400	
173	192	211	234	740	0.191	9850	190EA2	WB2 EA190	0.400	
193	215	235	262	900	0.18	10 800	180EA2	WB2 EA180	0.400	
216	243	263	296	1140	0.171	12 150	170EA2	WB2 EA170	0.400	
244	277	297	338	1450	0.161	13 700	160EA2	WB2 EA160	0.400	
278	317	339	386	1865	0.15	15 500	150EA2	WB2 EA150	0.400	
318	358	387	435	2415	0.141	17 500	140EA2	WB2 EA140	0.400	
359	399	436	485	3075	0.132	19 800	132EA2	WB2 EA132	0.400	
400	449	486	546	3800	0.125	22 000	125EA2	WB2 EA125	0.400	
450	497	547	605	4850	0.118	24 900	118EA2	WB2 EA118	0.400	
498	550	606	660	5850	0.112	27 100	112EA2	WB2 EA112	0.400	
551	611	-	-	7200	0.106	30 000	106EA2	WB2 EA106	0.400	

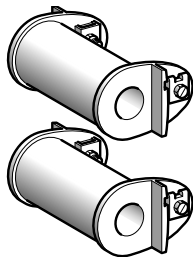
## Specifications

Operating range: 0.85 to 1.1 Uc (IEC 60947-4).

Average consumption of the 2 coils (inrush and sealed)	CV1 and CV3	F	Standard power	20 to 26 W
	CV1 and CV3	G J	Increased power	26 to 37 W
Time constant when sealed	CV1 and CV3	F	75 ms	
	CV1 and CV3	G J	100 ms	
Duty			100 %	

(1) The EK1 electromagnet always has two identical coils connected in series.

(2) For contactors CV1 F and CV3 F the selection of 20-26 W or 26-37 W coils depends on the composition of the contactor: i.e. number of poles and auxiliary contacts.



WB2 HA●

## References (continued)

## For contactors

Contactor	Type Size	CV1		CV3	
		H	J	H	K
Associated electromagnet		EK1 HA40	EK1 JA40	EK1 HA40	EK1 HA40

## Coils

Operating range				Coil (unit characteristics) (1)						
100 % duty (2)		50 % duty (2)		Resistance at 20 °C ±10 %	Wire diameter	Number of turns	Ref. code	Unit reference	Weight	
Un min.	Un max.	Un min.	Un max.							
V	V	V	V	Ω	mm				kg	
12	–	18	19	1.67	1	525	1000-HA2	WB2 HA1000	0.675	
13	14	20	22	2.12	0.95	610	950-HA2	WB2 HA950	0.675	
15	16	23	24	2.63	0.90	680	900-HA2	WB2 HA900	0.675	
17	18	25	28	3.38	0.85	777	850-HA2	WB2 HA850	0.675	
19	20	29	31	4.36	0.80	885	800-HA2	WB2 HA800	0.675	
21	23	32	35	5.33	0.75	960	750-HA2	WB2 HA750	0.675	
24	26	36	39	6.78	0.71	1090	710-HA2	WB2 HA710	0.675	
27	29	40	44	8.69	0.67	1240	670-HA2	WB2 HA670	0.675	
30	33	45	50	10.6	0.63	1350	630-HA2	WB2 HA630	0.675	
34	37	51	56	14.1	0.60	1600	600-HA2	WB2 HA600	0.675	
38	42	57	63	17.4	0.56	1740	560-HA2	WB2 HA560	0.675	
43	47	64	71	22.1	0.53	1970	530-HA2	WB2 HA530	0.675	
48	53	72	79	27.1	0.50	2160	500-HA2	WB2 HA500	0.675	
54	59	80	88	33.8	0.475	2420	475-HA2	WB2 HA475	0.675	
60	66	89	99	42.4	0.45	2720	450-HA2	WB2 HA450	0.675	
67	74	100	113	54.3	0.425	3100	425-HA2	WB2 HA425	0.675	
75	84	114	127	70.5	0.401	3550	400-HA2	WB2 HA400	0.675	
85	94	128	143	86.8	0.375	3870	375-HA2	WB2 HA375	0.675	
95	106	144	161	112	0.355	4450	355-HA2	WB2 HA355	0.675	
107	120	162	181	141	0.335	4980	335-HA2	WB2 HA335	0.675	
121	134	182	202	172	0.315	5400	315-HA2	WB2 HA315	0.675	
135	152	203	230	228	0.30	6400	300-HA2	WB2 HA300	0.675	
153	171	231	258	283	0.28	7000	280-HA2	WB2 HA280	0.675	
172	192	259	289	358	0.265	7900	265-HA2	WB2 HA265	0.675	
193	215	290	324	447	0.25	8800	250-HA2	WB2 HA250	0.675	
216	240	325	361	552	0.236	9700	236-HA2	WB2 HA236	0.675	
241	269	362	405	692	0.224	10 900	224-HA2	WB2 HA224	0.675	
270	301	406	453	875	0.212	12 300	212-HA2	WB2 HA212	0.675	
302	335	454	504	1066	0.20	13 400	200-HA2	WB2 HA200	0.675	
336	375	505	564	1336	0.19	15 100	190-HA2	WB2 HA190	0.675	
376	422	565	625	1683	0.18	17 000	180-HA2	WB2 HA180	0.675	
423	478	–	–	2161	0.17	19 400	170-HA2	WB2 HA170	0.675	
479	547	–	–	2786	0.16	22 100	160-HA2	WB2 HA160	0.675	
548	607	–	–	3697	0.15	25 600	150-HA2	WB2 HA150	0.675	

## Specifications

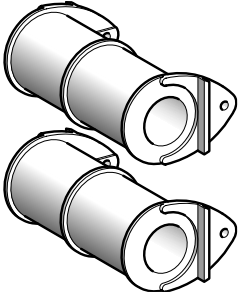
Operating range: 0.85 to 1.1 Uc

Power consumption of both coils (inrush and sealed)	CV1 and CV3	H	100 % duty	42 to 52 W
	CV1	J		
	CV3	K		
	CV3	K	50 % duty	93 to 116 W
Time constant when sealed	–	K	150 ms	

(1) The EK1 electromagnet always has two identical coils connected in series.

(2) Coil selection depends on the composition of the contactor.

50 % duty implies an energised time less than or equal to 2 minutes and a de-energised time longer than or equal to the energised time.



WB2 KA●

## References (continued)

## For contactors

Contactor	Type Size	CV1 K	L
Associated electromagnet		EK1 KA40	EK1 KA40

## Coils

Operating range		Coil (unit characteristics) (1)					
Un min.	Un max.	Resistance at 20 °C ±10 %	Wire diameter	Number of turns	Ref. code	Unit reference	Weight
V	V	Ω	mm				kg
22	24	3	1.12	800	1120-KA2	WB2 KA1120	1.710
25	27	3.6	1.06	877	1060-KA2	WB2 KA1060	1.710
28	30	4.6	1	990	1000-KA2	WB2 KA1000	1.710
31	34	5.8	0.95	1120	950-KA2	WB2 KA950	1.710
35	38	7.2	0.90	1250	900-KA2	WB2 KA900	1.710
39	43	9.2	0.85	1430	850-KA2	WB2 KA850	1.710
44	49	11.9	0.80	1630	800-KA2	WB2 KA800	1.710
50	55	14.7	0.75	1780	750-KA2	WB2 KA750	1.710
56	61	18.7	0.71	2020	710-KA2	WB2 KA710	1.710
62	69	23	0.67	2200	670-KA2	WB2 KA670	1.710
70	77	29	0.63	2470	630-KA2	WB2 KA630	1.710
78	88	38	0.6	2950	600-KA2	WB2 KA600	1.710
89	99	48	0.56	3220	560-KA2	WB2 KA560	1.710
100	111	60	0.53	3600	530-KA2	WB2 KA530	1.710
112	123	74	0.5	3970	500-KA2	WB2 KA500	1.710
124	137	92	0.475	4430	475-KA2	WB2 KA475	1.710
138	153	115	0.45	5000	450-KA2	WB2 KA450	1.710
154	173	146	0.425	5650	425-KA2	WB2 KA425	1.710
174	196	191	0.4	6500	400-KA2	WB2 KA400	1.710
197	220	238	0.375	7150	375-KA2	WB2 KA375	1.710
221	247	302	0.355	8100	355-KA2	WB2 KA355	1.710
248	279	386	0.335	9200	335-KA2	WB2 KA335	1.710
280	309	463	0.315	9850	315-KA2	WB2 KA315	1.710
310	353	614	0.30	11 700	300-KA2	WB2 KA300	1.710
354	395	766	0.281	12 800	280-KA2	WB2 KA280	1.710
396	443	964	0.265	14 400	265-KA2	WB2 KA265	1.710
444	498	1218	0.25	16 200	250-KA2	WB2 KA250	1.710
499	553	1490	0.236	17 700	236-KA2	WB2 KA236	1.710
554	626	1877	0.224	20 000	224-KA2	WB2 KA224	1.710

## Specifications

- Operating range: 0.85 to 1.1 U<sub>c</sub>
- Average consumption of the 2 coils (inrush and sealed): 80 to 105 W.
- Time constant when sealed: 180 ms.
- Duty: 100 %.

(1) The EK1 electromagnet always has two identical coils connected in series.





WB1 EA●

## References (continued)

## For contactors

Contactor	Type Size	CV1 F	CV3 F
Associated electromagnet		EB1 EA40	EB1 EA40

## Coils

Operating range		Coil		With economy resistor		Rectifier Reference DR5 TE1● (2)	Coil Reference	Weight			
d.c. min.	a.c. (1) max.	Resis- tance at 20 °C ±10 %	I inrush ± 10 % at Un max	Resistor Unit reference	Total resis- tance Ω				Number of contacts ZC4 GM2		
V	V	Ω	A		Ω			kg			
12	15	17	20	1.8	7.50	DR2 SC0027	27	1	U	WB1 EA043	0.180
16	20	21	25	3.3	5.66	DR2 SC0047	47	1	U	WB1 EA058	0.180
21	23	26	27	5.7	3.88	DR2 SC0082	82	1	U	WB1 EA077	0.180
24	27	28	33	7	3.72	DR2 SC0100	100	1	U	WB1 EA085	0.180
28	31	34	36	10.2	2.99	DR2 SC0150	150	1	U	WB1 EA100	0.180
32	36	37	41	12.6	2.83	DR2 SC0180	180	1	U	WB1 EA110	0.180
37	40	42	47	17.7	2.24	DR2 SC0270	270	1	U	WB1 EA135	0.180
41	49	48	57	24.6	1.98	DR2 SC0330	330	1	U	WB1 EA163	0.180
50	58	58	64	33.7	1.71	DR2 SC0470	470	1	U	WB1 EA182	0.180
59	65	65	71	41.6	1.56	DR2 SC0680	680	1	U	WB1 EA200	0.180
66	72	72	82	50.5	1.42	DR2 SC0820	820	1	U	WB1 EA220	0.180
73	835	83	91	70.4	1.18	DR2 SC1000	1000	1	U	WB1 EA264	0.180
84	92	92	101	85.5	1.07	DR2 SC1200	1200	1	U	WB1 EA290	0.180
93	102	102	113	104	0.980	DR2 SC1500	1500	1	U	WB1 EA315	0.180
103	116	114	125	127.9	0.906	DR2 SC1800	1800	1	U	WB1 EA345	0.180
117	124	126	140	156.3	0.793	DR2 SC2200	2200	1	U	WB1 EA380	0.180
125	139	141	155	199.2	0.697	DR2 SC2700	2700	1	U	WB1 EA432	0.180
140	159	156	172	233.1	0.682	DR2 SC3300	3300	1	U	WB1 EA455	0.180
160	177	173	191	284.1	0.623	DR2 SC3900	3900	1	U	WB1 EA500	0.180
178	198	192	213	347.1	0.570	DR2 SC5600	5600	1	U	WB1 EA550	0.180
199	220	214	245	418.2	0.526	DR2 SC6800	6800	1	U	WB1 EA595	0.180
221	252	246	278	581.7	0.433	DR2 SC8200	8200	1	S	WB1 EA720	0.180
253	286	279	316	727.7	0.393	DR2 SC1001	10 000	1	S	WB1 EA795	0.180
287	326	317	367	914.1	0.357	DR2 SC1201	12 000	1	S	WB1 EA880	0.180
327	381	368	428	1425.5	0.322	DR2 SC2201	22 000	1	S	WB1 EA1175	0.180
382	43	429	500	1374.5	0.267	DR2 SC1001	10 000 + 10 000	2	S	WB1 EA970	0.180
444	500	-	-	2355.1	0.219	DR2 SC1801	18 000 + 18 000	2	S	WB1 EA1430	0.180

## Specifications

- Operating range: 0.85 to 1.1 Uc
- Time constant when sealed: 9 ms.
- Maximum operating rate: 120 operating cycles/hour ( $\theta \leq 55$  °C).

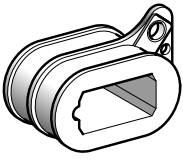
Average consumption	d.c. operation		a.c. (with rectifier)			
	Un min.	Un max.	Un min.	Un max.	Un min.	Un max.
	W	W	VA	W	VA	W
Inrush	70	150	85	-	180	-
Sealed (coil)	0.25	0.7	-	0.3	-	0.75
Economy resistor	10	11	-	4.5	-	11

(1) a.c. (50-400 Hz) with individual rectifier and economy resistor, see scheme on page 26229/3.

(2) Complete the silicon rectifier reference DR5 TE1U or DR5 TE1S.

# TeSys contactors

Coils - d.c. with economy resistor  
Coils - rectified a.c. with economy resistor



WB1 GA●

## References (continued)

## For contactors

Contactor	Type Size	CV1 G	CV3 G	J (2 poles)
Associated electromagnet		EB1 GA40	EB1 GA40	EB1 GA40

## Coils

Operating range		Coil		With economy resistor		Rectifier	Coil	Weight			
d.c.		a.c. (1)		Resistor	Number of contacts ZC4 GM2	Reference DR5 TE1● (2)	Reference				
min.	max.	min.	max.	Unit reference				Total resistance			
V	V	V	V	Ω	A	Ω		kg			
12	12	17	17	0.40	20	DR2 SC0012	12	1	U	WB1 GA024	0.220
13	14	18	19	0.67	16	DR2 SC0018	18	1	U	WB1 GA032	0.220
15	17	20	23	1.32	11.1	DR2 SC0027	27	1	U	WB1 GA048	0.220
18	23	24	28	1.87	11.1	DR2 SC0039	39	1	U	WB1 GA054	0.220
24	26	29	32	4.17	6	DR2 SC0082	82	1	U	WB1 GA085	0.220
27	32	33	39	5.29	5.8	DR2 SC0100	100	1	U	WB1 GA095	0.220
33	40	40	48	7.26	5.36	DR2 SC0150	150	1	U	WB1 GA105	0.220
41	50	49	59	11.09	4.43	DR2 SC0220	220	1	U	WB1 GA130	0.220
51	58	60	67	17.28	3.32	DR2 SC0330	330	1	U	WB1 GA160	0.220
59	72	68	83	23.36	3.06	DR2 SC0470	470	1	U	WB1 GA190	0.220
73	89	84	102	33.74	2.62	DR2 SC0680	680	1	U	WB1 GA220	0.220
90	106	103	120	47.33	2.23	DR2 SC1000	1000	1	U	WB1 GA250	0.220
107	131	121	148	85.48	1.53	DR2 SC1500	1500	1	U	WB1 GA380	0.220
132	162	149	183	123.32	1.31	DR2 SC2200	2200	1	U	WB1 GA440	0.220
163	181	184	203	174.20	1.04	DR2 SC3300	3300	1	U	WB1 GA503	0.220
182	203	204	230	212.39	0.95	DR2 SC3900	3900	1	U	WB1 GA550	0.220
204	249	231	281	259.73	0.96	DR2 SC4700	4700	1	S	WB1 GA600	0.220
250	280	282	316	360.90	0.78	DR2 SC6800	6800	1	S	WB1 GA680	0.220
281	316	317	356	469.85	0.67	DR2 SC8200	8200	1	S	WB1 GA790	0.220
317	367	357	412	609.71	0.60	DR2 SC1201	12 000	1	S	WB1 GA905	0.220
368	414	413	465	604.08	0.46	DR2 SC1001 DR2 SC8200	10000 + 8200	1	S	WB1 GA1160	0.220
415	480	466	531	1029.53	0.47	DR2 SC1001	10 000 + 10 000	2	S	WB1 GA1170	0.220
481	576	-	-	1495.16	0.39	DR2 SC1501	15 000 + 15 000	2	-	WB1 GA1480	0.220

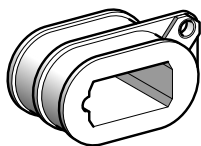
## Specifications

- Operating range: 0.85 to 1.1 Uc
- Time constant when sealed: 11 ms.
- Maximum operating rate: 120 operating cycles/hour ( $\theta \leq 55$  °C).

Average consumption	d.c. operation		a.c. (with rectifier)			
	Un min.	Un max.	Un min.	Un max.	Un min.	Un max.
	W	W	VA	W	VA	W
Inrush	130	250	160	-	300	-
Sealed (coil)	0.35	0.5	-	0.4	-	0.65
Economy resistor	6.5	11	-	7	-	12

(1) a.c. (50-400 Hz) with individual rectifier and economy resistor, see scheme on page 26229/3.

(2) Complete the silicon rectifier reference DR5 TE1U or DR5 TE1S.



WB1 HA●

## References (continued)

## For contactors

Contactor	Type Size	CV1 H	CV3 H	K (2 poles) EB1 HA40
Associated electromagnet		EB1 HA40	EB1 HA40	EB1 HA40

## Coils

Operating range		Coil		With economy resistor			Rectifier	Coil	Weight		
d.c.		a.c. (1)		Resistor Unit reference	Total resistance	Number of contacts ZC4 GM2	Reference DR5 TE1● (2)	Reference			
min.	max.	min.	max.						Resistance at 20 °C at Un ±10 %	Inrush ± 10 % at Un max	Reference
V	V	V	V	Ω	A	Ω			kg		
12	13	17	18	0.29	28	DR2 SC0018	18//18	1	U	WB1 HA026	0.280
14	15	19	20	0.77	15	DR2 SC0015	15	1	U	WB1 HA044	0.280
16	19	21	24	1.34	12	DR2 SC0027	27	1	U	WB1 HA060	0.280
20	21	25	26	2.12	9	DR2 SC0039	39	1	U	WB1 HA075	0.280
22	26	27	31	2.61	9	DR2 SC0047	47	1	U	WB1 HA082	0.280
27	32	32	34	4.00	7.6	DR2 SC0068	68	1	U	WB1 HA100	0.280
33	35	35	42	5.35	6.3	DR2 SC0100	100	1	U	WB1 HA120	0.280
36	41	43	47	7.27	5.5	DR2 SC0120	120	1	U	WB1 HA130	0.280
42	50	48	58	10.24	4.8	DR2 SC0180	180	1	U	WB1 HA160	0.280
51	62	59	72	17.55	3.5	DR2 SC0270	270	1	U	WB1 HA220	0.280
63	75	73	81	27.81	2.7	DR2 SC0470	470	1	U	WB1 HA275	0.280
76	85	82	90	34.42	2.5	DR2 SC0560	560	1	U	WB1 HA300	0.280
86	90	91	101	41.99	2.1	DR2 SC0680	680	1	U	WB1 HA330	0.280
91	106	102	113	54.52	1.9	DR2 SC0820	820	1	U	WB1 HA380	0.280
107	120	114	125	64.52	1.85	DR2 SC1200	1200	1	U	WB1 HA400	0.280
121	130	126	143	78.10	1.66	DR2 SC1500	1500	1	U	WB1 HA440	0.280
131	153	144	160	101.90	1.50	DR2 SC1800	1800	1	U	WB1 HA500	0.280
154	164	161	178	129.30	1.27	DR2 SC2200	2200	1	U	WB1 HA567	0.280
165	191	179	203	153.80	1.24	DR2 SC2700	2700	1	U	WB1 HA600	0.280
192	216	204	244	221.80	0.97	DR2 SC3900	3900	1	U	WB1 HA765	0.280
217	245	245	272	228.20	1.07	DR2 SC3900	3900	1	S	WB1 HA660	0.280
246	298	275	334	290	1.03	DR2 SC4700	4700	1	S	WB1 HA750	0.280
299	326	336	354	413.90	0.79	DR2 SC6800	6800	1	S	WB1 HA850	0.280
327	380	357	424	729.20	0.52	DR2 SC1201	12 000	1	S	WB1 HA1500	0.280
381	450	427	500	704.40	0.64	DR2 SC1201	12 000	2	S	WB1 HA1150	0.280

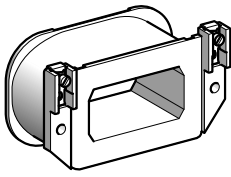
## Specifications

- Operating range: 0.85 to 1.1 Uc
- Time constant when sealed: 12 ms.
- Maximum operating rate: 120 operating cycles/hour ( $\theta \leq 55$  °C).

Average consumption	d.c. operation		a.c. (with rectifier)			
	Un min.	Un max.	Un min.	Un max.	Un min.	Un max.
	W	W	VA	W	VA	W
Inrush	150	280	180	–	340	–
Sealed (coil)	0.4	0.75	–	0.4	–	0.8
Economy resistor	7.5	14	–	8	–	15

(1) a.c. (50-400 Hz) with individual rectifier and economy resistor, see scheme on page 26229/3.

(2) Complete the silicon rectifier reference DR5 TE1U or DR5 TE1S.



WB1 JB

## References (continued)

## For contactors

Contactor	Type Size	CV1 J	CV3 K (3 and 4 poles)
Associated electromagnet		EB1 JB40 (d.c.) EB5 JB40 (rectified)	EC1 HA40 EC1 HA40

## Coils

Operating range		Coil		With economy resistor		Rectifier	Coil	Weight			
d.c.		a.c. (1)		Resistor	Number of contacts ZC4 GM2	Reference DR5 TE1● (2)	Reference				
min.	max.	min.	max.	Unit reference				Total resistance			
V	V	V	V	Ω	A	Ω		kg			
11	13	-	-	0.39	22	DR2 SC0012	12	1	-	WB1 JB318	0.560
14	16	-	-	0.92	14.23	DR2 SC0022	22	1	-	WB1 JB322	0.560
17	18	-	-	1.56	10.18	DR2 SC0039	39	1	-	WB1 JB326	0.560
19	21	24	25	2.26	8.52	DR2 SC0047	47	1	U	WB1 JB328	0.560
22	23	26	28	3.17	6.81	DR2 SC0068	68	1	U	WB1 JB330	0.560
24	21	29	31	3.90	6.33	DR2 SC0082	82	1	U	WB1 JB331	0.560
27	29	32	34	5.15	5.42	DR2 SC0100	100	1	U	WB1 JB334	0.560
30	32	35	38	6.29	4.93	DR2 SC0120	120	1	U	WB1 JB335	0.560
33	36	39	42	7.99	4.39	DR2 SC0180	180	1	U	WB1 JB337	0.560
37	39	43	46	9.93	3.85	DR2 SC0220	220	1	U	WB1 JB338	0.560
40	45	47	53	11.95	3.70	DR2 SC0220	220	1	U	WB1 JB339	0.560
46	50	54	58	15.79	3.13	DR2 SC0330	330	1	U	WB1 JB341	0.560
51	56	59	65	19.37	2.86	DR2 SC0390	390	1	U	WB1 JB342	0.560
57	63	66	72	22.76	2.74	DR2 SC0470	470	1	U	WB1 JB343	0.560
64	70	73	79	30.60	2.27	DR2 SC0560	560	1	U	WB1 JB345	0.560
71	78	80	89	35.13	2.21	DR2 SC0680	680	1	U	WB1 JB346	0.560
79	87	90	99	43.18	2.01	DR2 SC0820	820	1	U	WB1 JB347	0.560
88	101	100	114	53.04	1.90	DR2 SC1000	1000	1	U	WB1 JB348	0.560
102	113	115	127	76.59	1.47	DR2 SC1500	1500	1	U	WB1 JB428	0.560
114	127	128	143	95.85	1.32	DR2 SC1800	1800	1	U	WB1 JB429	0.560
128	157	144	177	119	1.32	DR2 SC2200	2200	1	U	WB1 JB430	0.560
158	181	178	203	181.60	1	DR2 SC3300	3300	1	U	WB1 JB431	0.560
182	226	204	255	242	0.93	DR2 SC4700	4700	1	U	WB1 JB432	0.560
227	282	256	318	371.30	0.76	DR2 SC6800	6800	1	S	WB1 JB433	0.560
283	354	319	398	565.60	0.63	DR2 SC1001	10 000	1	S	WB1 JB434	0.560
355	437	399	491	881.90	0.50	DR2 SC1001 + DR2 SC8200	10 000 + + 8200	1	S	WB1 JB435	0.560
438	500	492	500	1328.10	0.38	DR2 SC1501 + DR2 SC1201	15 000 + + 12 000	2	S	WB1 JB436	0.560

## Specifications

- Operating range: 0.85 to 1.1 Uc
- Time constant when sealed: 25 ms.
- Maximum operating rate: 120 operating cycles/hour (θ ≤ 55 °C).

Average consumption	d.c. operation		a.c. (with rectifier)			
	Un min.	Un max.	Un min.	Un max.	Un min.	Un max.
	W	W	VA	W	VA	W
Inrush	130	220	160	-	270	-
Sealed (coil)	0.35	0.7	-	0.4	-	0.765
Economy resistor	6.5	13	-	7	-	13

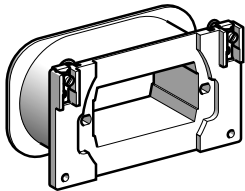
(1) a.c. (50-400 Hz) with individual rectifier and economy resistor, see scheme on page 26229/3.

(2) Complete the silicon rectifier reference DR5 TE1U or DR5 TE1S.

## TeSys contactors

Coils - d.c. with economy resistor

Coils - rectified a.c. with economy resistor



WB1 KB●

## References (continued)

## For contactors

Contactor	Type Size	CV1 K	CV3 L (2 poles)
Associated electromagnet		EB5 KB40	EB5 KB40

## Coils

Operating range		Coil		With economy resistor			Rectifier	Coil	Weight		
d.c.		a.c. (1)		Resistor Unit reference	I inrush $\pm 10\%$ $\hat{a} U_n$ max.	Number of contacts ZC4 GM2	Reference DR5 TE1● (2)	Reference			
min.	max.	min.	max.						Total resistance		
V	V	V	V	$\Omega$	A	$\Omega$			kg		
19	22	-	-	1.4	16	DR2 SC0068	68	1	-	WB1 KB162	1.120
23	24	-	-	1.9	13	DR2 SC0100	100	1	-	WB1 KB154	1.120
25	27	-	-	2.4	11	DR2 SC0120	120	1	-	WB1 KB153	1.120
28	30	35	37	3.3	9.3	DR2 SC0150	150	1	U	WB1 KB141	1.120
31	33	38	40	4.2	8.2	DR2 SC0180	180	1	U	WB1 KB142	1.120
34	36	41	44	5.1	7.3	DR2 SC0220	220	1	U	WB1 KB155	1.120
37	40	45	49	5.9	6.8	DR2 SC0270	270	1	U	WB1 KB132	1.120
41	47	50	56	7.3	6.5	DR2 SC0330	330	1	U	WB1 KB123	1.120
48	51	57	60	9.5	5.3	DR2 SC0470	470	1	U	WB1 KB133	1.120
52	59	61	70	11.6	5.2	DR2 SC0560	560	1	U	WB1 KB121	1.120
60	65	71	77	16.2	4	DR2 SC0820	820	1	U	WB1 KB130	1.120
66	72	78	84	19.9	3.7	DR2 SC1000	1000	1	U	WB1 KB140	1.120
73	82	85	94	25.5	3.3	DR2 SC1200	1200	1	U	WB1 KB134	1.120
83	103	95	118	33.1	3.2	DR2 SC1500	1500	1	U	WB1 KB124	1.120
104	115	119	132	50.9	2.3	DR2 SC2200	2200	1	U	WB1 KB122	1.120
116	128	133	146	61.3	2.1	DR2 SC2700	2700	1	U	WB1 KB135	1.120
129	144	147	164	78.4	1.9	DR2 SC3900	3900	1	U	WB1 KB136	1.120
145	170	165	193	94.8	1.8	DR2 SC4700	4700	1	U	WB1 KB139	1.120
171	188	194	213	123.9	1.5	DR2 SC5600	5600	1	U	WB1 KB125	1.120
189	207	214	238	159.9	1.3	DR2 SC8200	8200	1	U	WB1 KB137	1.120
208	244	239	279	199.6	1.2	DR2 SC1001	10 000	1	S	WB1 KB126	1.120
245	313	280	356	247.4	1.2	DR2 SC1201	12 000	1	S	WB1 KB138	1.120
314	337	357	383	382	0.82	DR2 SC1801	18 000	1	S	WB1 KB127	1.120
338	429	384	485	507	0.84	DR2 SC1201	12 000 + 12 000	1	S	WB1 KB128	1.120
430	500	486	500	770	0.64	DR2 SC1801	18 000 + 18 000	2	S	WB1 KB129	1.120

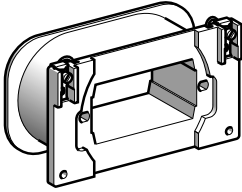
## Specifications

- Operating range: 0.85 to 1.1 Uc
- Time constant when sealed: 45 ms.
- Maximum operating rate: 120 operating cycles/hour ( $\theta \leq 55^\circ\text{C}$ ).

Average consumption	d.c. operation		a.c. (with rectifier)			
	Un min.	Un max.	Un min.	Un max.	Un min.	Un max.
	W	W	VA	W	VA	W
Inrush	215	380	260	-	460	-
Sealed (coil)	0.1	0.2	-	0.1	-	0.2
Economy resistor	4.5	8	-	5	-	9

(1) a.c. (50-400 Hz) with individual rectifier and economy resistor, see scheme on page 26229/3.

(2) Complete the silicon rectifier reference DR5 TE1U or DR5 TE1S.



WB1 KB●

## References (continued)

## For contactors

Contactor	Type	CV1
	Size	L (3 and 4 poles)

Associated electromagnet **EB5 KB40**

## Coils

Operating range		Coil		Economy resistor		Rectifier Reference DR5 TE1● (2)	Coil Reference	Weight			
d.c.		Resis- tance à 20 °C ±10 %	I inrush ±10 % at Un maxi	Resistor Unit reference	Total resis- tance				Number of contacts ZC4 GM2		
min.	max.					Ω	A	Ω		kg	
24	25	–	–	1.85	14	DR2 SC0068	68	1	–	WB1 KB154	1.120
26	28	–	–	2.35	12	DR2 SC0100	100	1	–	WB1 KB153	1.120
29	31	36	38	3.22	9.6	DR2 SC0120	120	1	U	WB1 KB141	1.120
32	34	39	42	4.04	8.4	DR2 SC0150	150	1	U	WB1 KB142	1.120
35	38	43	46	4.96	7.7	DR2 SC0180	180	1	U	WB1 KB155	1.120
39	42	47	51	5.86	7.2	DR2 SC0220	220	1	U	WB1 KB132	1.120
43	49	52	59	7.2	6.8	DR2 SC0270	270	1	U	WB1 KB123	1.120
50	53	60	63	9.6	5.5	DR2 SC0390	390	1	U	WB1 KB133	1.120
54	62	64	73	11.4	5.4	DR2 SC0470	470	1	U	WB1 KB121	1.120
63	68	74	80	16.3	4.2	DR2 SC0680	680	1	U	WB1 KB130	1.120
69	76	81	88	19.7	3.9	DR2 SC0820	820	1	U	WB1 KB140	1.120
77	86	89	100	25.2	3.4	DR2 SC1000	1000	1	U	WB1 KB134	1.120
87	109	101	125	32.5	3.3	DR2 SC1200	1200	1	U	WB1 KB124	1.120
110	121	126	139	49.7	2.4	DR2 SC1800	1800	1	U	WB1 KB122	1.120
122	135	140	154	61	2.2	DR2 SC2200	2200	1	U	WB1 KB135	1.120
136	151	155	172	77.2	2	DR2 SC2700	2700	1	U	WB1 KB136	1.120
152	179	173	203	94	1.9	DR2 SC3300	3300	1	U	WB1 KB139	1.120
180	197	204	223	128	1.5	DR2 SC4700	4700	1	U	WB1 KB125	1.120
198	217	224	248	160	1.4	DR2 SC5600	5600	1	U	WB1 KB137	1.120
218	256	249	292	197	1.3	DR2 SC6800	6800	1	S	WB1 KB126	1.120
257	329	293	373	257	1.3	DR2 SC1001	10 000	1	S	WB1 KB138	1.120
330	354	374	401	408	0.86	DR2 SC1501	15 000	1	S	WB1 KB127	1.120
355	451	402	500	507	0.89	DR2 SC1001	10 000 + 8200	2	S	WB1 KB128	1.120
452	500	–	–	785	0.63	DR2 SC1501	15 000 + 15 000	2	–	WB1 KB129	1.120

## Specifications

- Operating range: 0.85 to 1.1 Uc
- Time constant when sealed: 45 ms.
- Maximum operating rate: 120 operating cycles/hour ( $\theta \leq 55$  °C).

Average consumption	d.c.		a.c. (with rectifier)			
	Un min.	Un max.	Un min.	Un max.	Un min.	Un max.
	W	W	VA	W	VA	W
Inrush	240	420	290	–	515	–
Sealed (coil)	0.2	0.3	–	0.2	–	0.3
Economy resistor	7	11	–	7.5	–	12

(1) a.c. (50-400 Hz) with individual rectifier and economy resistor, see scheme on page 26229/3.

(2) Complete the silicon rectifier reference DR5 TE1U or DR5 TE1S.