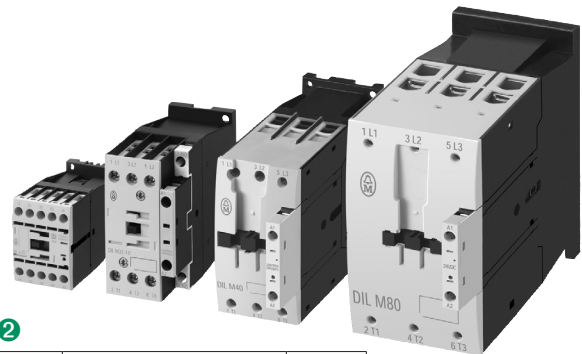


Frame Size	Moeller Contactor	Maximum Horsepower (UL/CSA)						
		Single Phase		Three Phase				
		115 Volt	230 Volt	200 Volt	230 Volt	460 Volt	575 Volt	
	DIL M7	¼	1	1½	2	3	5	NEMA Size 00
		⅓	1	1½	1½	2	2	
	DIL M9	½	1½	3	3	5	7½	NEMA Size 0
		1	2	3	3	5	5	
	DIL M12	1	2	3	3	10	10	NEMA Size 1
	DIL M17	2	3	5	5	10	15	
		2	3	7½	7½	10	10	
	DIL M25	2	5	7½	10	15	20	
	DIL M32	3	5	10	10	20	25	NEMA Size 2
		3	7½	10	15	25	25	
	DIL M40	3	7½	10	15	30	40	
	DIL M50	3	10	15	20	40	50	
	DIL M65	5	15	20	25	50	60	NEMA Size 3
		7½	15	25	30	50	50	
	DIL M80	7½	15	25	30	60	75	
	DIL M95	7½	15	25	40	75	100	
		–	–	40	50	100	100	
	DIL M115	10	25	40	50	100	100	
	DIL M150	10	30	40	60	125	125	NEMA Size 4
	DIL M185	–	–	50	60	125	150	
	DIL M225	–	–	60	75	150	200	
		–	–	75	100	200	200	
	DIL M250	–	–	75	100	200	250	NEMA Size 5
	DIL M300	–	–	100	125	250	300	
	DIL M400	–	–	125	150	300	400	
		–	–	150	200	400	400	
	DIL M500	–	–	150	200	400	500	NEMA Size 6
	DIL M580	–	–	200	200	400	600	
	DIL M650	–	–	200	250	500	600	
		–	–	–	300	600	600	
	DIL M750	–	–	250	300	600	700	
	DIL M820	–	–	290	350	700	860	
		–	–	–	450	900	900	NEMA Size 7
	DIL M1000	–	–	350	400	800	1000	
	DIL M1500	–	–	560	640	1200	1300	
								NEMA Size 8

Compare Moeller's 24 contactor sizes to just 10 equivalent NEMA sizes

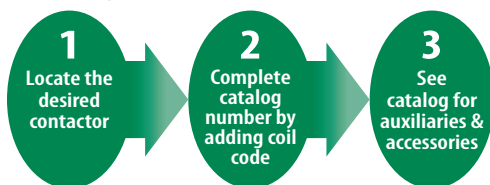
- > Wide voltage tolerance +10% to -20% nominal
- > Front mounted coil terminals
- > Four compact frame sizes cover applications to 150A
- > Dual box terminals make wiring safer and easier for cables with uneven cross-sections
- > New plug-in technology provides tool-less connection with other contactors and accessories, saving time and reducing wiring errors



### UL/CSA Three-pole Contactors with AC Coil (to 150 Amps) 1 2

UL/CSA General Use [A]	Maximum UL / CSA Horsepower Ratings									Integrated Auxiliary Contacts		Catalog Number	Price
	Single Phase AC			Three Phase AC				DC		NO	NC		
600 V	115 V	200 V	230 V	200 V	230 V	460 V	575 V	125 V	250 V				
20	¼	¾	1	1½	2	3	5	¼	1	1	0	DILM7-10 ♦ 3	88
				2	3	5	7½	½	1½	0	1	DILM7-01 ♦ 3	88
20	½	1	1½	3	3	5	7½	½	1½	1	0	DILM9-10 ♦ 3	100
				3	3	5	7½	½	1½	0	1	DILM9-01 ♦ 3	100
20	1	2	2	3	3	10	10	¾	2	1	0	DILM12-10 ♦ 3	124
				3	3	10	10	¾	2	0	1	DILM12-01 ♦ 3	124
40	2	2	3	5	5	10	15	2	3	1	0	DILM17-10 ♦	130
				5	5	10	15	2	3	0	1	DILM17-01 ♦	130
40	2	3	5	7½	10	15	20	2	5	1	0	DILM25-10 ♦	175
				7½	10	15	20	2	5	0	1	DILM25-01 ♦	175
40	3	5	5	10	10	20	25	3	5	1	0	DILM32-10 ♦	220
				10	10	20	25	3	5	0	1	DILM32-01 ♦	220
55	3	5	7½	10	15	30	40	5	10	0	0	DILM40 ♦	250
65	3	7½	10	15	20	40	50	7½	15	0	0	DILM50 ♦	290
80	5	10	15	20	25	50	60	10	20	0	0	DILM65 ♦	390
125	7½	15	15	25	30	60	75	10	25	0	0	DILM80 ♦	480
125	7½	15	15	25	40	75	100	10	25	0	0	DILM95 ♦	595
155	10	25	25	40	50	100	100	15	30	0	0	DILM115 ♦ 5	820
155	10	25	30	40	60	125	125	15	30	0	0	DILM150 ♦ 5	1010

### Ordering Instructions



- Positively guided contacts within all auxiliary contact modules (including any internal auxiliaries). Mirror contacts on all contactors (in relation to internal or external auxiliaries).
- May combine side mount and front mount auxiliary contact modules. For maximum number of auxiliary contacts see page A22 in *Start with Moeller* catalog.

### AC Coil Codes - DILM7 – 95 4

Complete catalog number (♦) with...	Voltage Range	
	50 Hz	60Hz
(24V60Hz)	–	24V
(120V60Hz)	110V	120V
(208V60Hz)	–	208V
(220V60Hz)	190V	220V
(240V60Hz)	230V	240V
(480V60Hz)	415V	480V
(600V60Hz)	–	600V

### AC Coil Codes - DILM115 – 150 5

Complete catalog number (♦) with...	Voltage Range
	50/60 Hz
(RAC24)	24V
(RAC120)	120V
(RAC240)	190V – 240V
(RAC500)	480V – 500V

- Coils not replaceable.
- Other coil voltages between 24 and 600V AC available by special order. Contact your Moeller representative for information.
- Includes integrated surge suppressor.

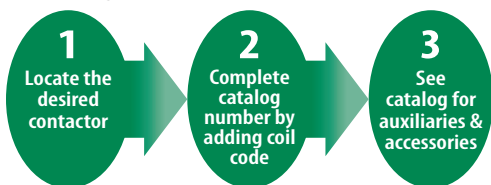
- > Wide voltage tolerance +20% to -30% nominal
- > Front mounted coil terminals
- > Exact same compact size as Moeller's AC contactors, saving panel space
- > Electronically controlled magnet system (from DIL M17) provides less heat dissipation and reduced power consumption
- > Direct actuation from a PLC without coupling relays (DIL M17 to 65)
- > Integrated surge suppressor standard
- > New plug-in technology provides tool-less connection with other contactors and accessories, saving time and reducing wiring errors



### UL/CSA Three-pole Contactors with DC Coil (to 150 Amps) 1 2

UL/CSA General Use [A]	Maximum UL / CSA Horsepower Ratings									Integrated Auxiliary Contacts		Catalog Number	Price
	Single Phase AC			Three Phase AC				DC					
	115 V	200 V	230 V	200 V	230 V	460 V	575 V	125 V	250 V	NO	NC		
600 V	¼	¾	1	1½	2	3	5	¼	1	1	0	DILM7-10◆ ③	110
										0	1		
20	½	1	1½	3	3	5	7½	½	1½	1	0	DILM9-10◆ ③	120
										0	1		
20	1	2	2	3	3	10	10	¾	2	1	0	DILM12-10◆ ③	158
										0	1		
40	2	2	3	5	5	10	15	2	3	1	0	DILM17-10◆	185
				0	1					DILM17-01◆	185		
40	2	3	5	7½	10	15	20	2	5			1	0
										0	1	DILM25-01◆	225
40	3	5	5	10	10	20	25	3	5	1	0		
										0	1	DILM32-01◆	310
55	3	5	7½	10	15	30	40	5	10	0	0		
65	3	7½	10	15	20	40	50	7½	15	0	0	DILM50◆	460
80	5	10	15	20	25	50	60	10	20	0	0	DILM65◆	585
125	7½	15	15	25	30	60	75	10	25	0	0	DILM80◆	650
125	7½	15	15	25	40	75	100	10	25	0	0	DILM95◆	775
155	10	25	25	40	50	100	100	15	30	0	0	DILM115◆	925
155	10	25	30	40	60	125	125	15	30	0	0	DILM150◆	1196

### Ordering Instructions



### DC Coil Codes - DILM7 – 12 ④

Complete catalog number (◆) with...	Voltage
(24VDC)	24V
(48VDC)	48V

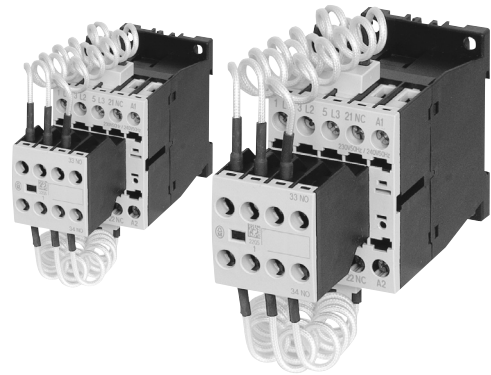
### DC Coil Codes - DILM17 – 150 ④

Complete catalog number (◆) with...	Voltage Range
(RDC24)	24 – 27V DC
(RDC60)	48 – 60V DC
(RDC130)	110 – 130V DC
(RDC240)	200 – 240V DC

- ① Positively guided contacts within all auxiliary contact modules (including any internal auxiliaries). Mirror contacts on all contactors (in relation to internal or external auxiliaries).
- ② May combine side mount and front mount auxiliary contact modules. For maximum number of auxiliary contacts see page A22 in *Start with Moeller* catalog.

- ③ Coils not replaceable.
- ④ Other coil voltages between 12 and 250V DC available by special order. Contact your Moeller representative for information.

- > Economical solution for both individual and group power factor correction applications
- > Special weld resistant contact material ensures longer life
- > All units pre-wired and ready to install



### Capacitor Switching Contactor; with Series Resistors ①

Three-Phase Capacitors			Standard Auxiliary Contacts		Catalog Number	Price
50 – 60 Hz			NO	NC		
240 V kvar	480 V kvar	600 V kvar				
7.5	15	15	1	1	DILK12-11◆	243
12	20	30	1	1	DILK20-11◆	266
15	30	40	1	1	DILK25-11◆	412
20	40	50	1	0	DILK33-10◆	578
30	60	75	1	0	DILK50-10◆	1070

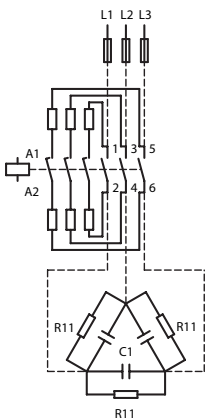
#### Application Note

In the case of group compensation, multi-stage capacitor banks are connected to the main supply as required. In the process, transient currents of up to  $180 \times I_e$  can flow between the capacitors.

The capacitors are pre-charged via the early-make auxiliary contacts and the fitted wire resistors, thereby reducing the inrush current. The main contacts then close after a time lag and carry the uninterrupted current.

Moeller's Capacitor Switching Contactors are weld-resistant with in-rush current peaks up to  $180 \times I_e$  due to their special contact material.

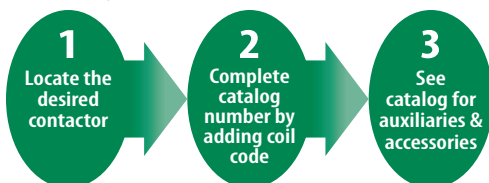
Circuit Without Quick Discharge Resistor



#### AC Coil Codes ①

Complete catalog number (◆) with...	Voltage Range	
	50 Hz	60Hz
(24V60Hz)	–	24V
(120V60Hz)	110V	120V
(208V60Hz)	–	208V
(220V60Hz)	190V	220V
(240V60Hz)	230V	240V
(480V60Hz)	415V	480V
(600V60Hz)	–	600V

#### Ordering Instructions



① Coils not replaceable.

- > Space-saving design reduces panel space and cost
- > Units are pre-assembled with electrical and mechanical interlocks
- > Ingenious mechanical interlocks add no additional space
- > Dual box terminals make wiring safer and easier for cables with uneven cross-sections



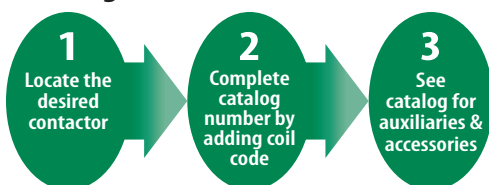
### Assembled Reversing Contactor Combinations with AC Coils 1 2 3

General Use [A]	Maximum UL / CSA Horsepower Ratings				Standard Auxiliary Contacts per contactor		Catalog Number	Price
	Three Phase				NO	NC		
600 V	200 V	230 V	460 V	575 V				
20	1½	2	3	5	2	1	DIULM7/21 <span style="color: green;">◆</span> <span style="color: green;">③</span>	365
20	3	3	5	7½	2	1	DIULM9/21 <span style="color: green;">◆</span> <span style="color: green;">③</span>	380
20	3	3	10	10	2	1	DIULM12/21 <span style="color: green;">◆</span> <span style="color: green;">③</span>	400
40	5	5	10	15	2	1	DIULM17/21 <span style="color: green;">◆</span> <span style="color: green;">③</span>	500
40	7½	10	15	20	2	1	DIULM25/21 <span style="color: green;">◆</span>	575
40	10	10	20	25	2	1	DIULM32/21 <span style="color: green;">◆</span>	670
55	10	15	30	40	1	1	DIULM40/11 <span style="color: green;">◆</span>	810
65	15	20	40	50	1	1	DIULM50/11 <span style="color: green;">◆</span>	860
80	20	25	50	60	1	1	DIULM65/11 <span style="color: green;">◆</span>	980

### AC Coil Codes ③

Complete catalog number (◆) with...	Voltage Range	
	50 Hz	60Hz
(24V60Hz)	–	24V
(120V60Hz)	110V	120V
(208V60Hz)	–	208V
(220V60Hz)	190V	220V
(240V60Hz)	230V	240V
(480V60Hz)	415V	480V
(600V60Hz)	–	600V

### Ordering Instructions



- ① Positively guided contacts within all auxiliary contact modules (including any internal auxiliaries). Mirror contacts on all contactors (in relation to internal or external auxiliaries).
- ② Contact elements of the contactor to EN 50012.
- ③ Coils not replaceable.

Contactors			DILEM(4)	DILMP20	DILM7	DILM9	DILM12	DILM17
<b>Main Contacts (cont.)</b>								
Component lifespan								
AC-1	400V	$I_e$	[x 10 <sup>6</sup> ]	—	0.6	0.6	0.6	0.6
Maximum operating frequency								
AC-1	400V	$I_e$	[Ops/h]	—	800	800	800	800
AC-3	400V	$I_e$	[Ops/h]	—	1000	1000	1000	800
AC-4	400V	$I_e$	[Ops/h]	—	300	300	300	300
Short circuit rating - Max. fuse								
Type "2"	400V	gG/gL 500V	[A]	10	20	20	20	25
	690V	gG/gL 690V	[A]	—	20	16	16	25
	1000V	gG/gL 1000V	[A]	—	—	—	—	—
Type "1"	400V	gG/gL 500V	[A]	20	35	35	35	63
	690V	gG/gL 690V	[A]	—	25	20	20	50
	1000V	gG/gL 1000V	[A]	—	—	—	—	—
<b>UL/CSA - General Use</b>								
Continuous current rating								
AC, 50/60Hz, 3 pole	600V		[A]	15	20	20	20	40
DC	250V		[A]	—	20	20	20	40
Full load amperes (FLA)								
1 - pole	115V		[A]	—	—	5.8	9.8	16
	200V		[A]	—	—	7.9	9.2	13.8
	230V		[A]	—	—	8	10	17
3 - pole	200V		[A]	—	—	—	—	17.5
	230V		[A]	—	—	6.8	9.6	15.2
	480V		[A]	—	—	4.8	7.6	14
	600V		[A]	—	—	6.1	9	17
Locked rotor amperes (LRA)								
3 - pole	230V		[A]	—	—	50	64	92
	480V		[A]	—	—	32	46	81
	600V		[A]	—	60	36.8	50.8	93
Horsepower ratings, AC								
Single phase	115V		[HP]	½	½	¼	½	2
	200V		[HP]	1	1	¾	1	2
	230V		[HP]	1½	1½	1	1½	3
Three phase	200V		[HP]	2	3	1½	3	5
	230V		[HP]	3	3	2	3	5
	460V		[HP]	5	5	3	5	10
	575V		[HP]	5	7½	5	7½	15
Horsepower ratings, DC								
Full load amperes (FLA)	125V		[A]	—	—	—	—	—
	250V		[A]	—	—	—	—	—
3 - pole break	125V	$I_e$	[HP]	—	¾	¼	½	2
	250V	$I_e$	[HP]	—	2	1	1½	3

	DILM25	DILM32	DILM40	DILM50	DILM65	DILM80	DILM95	DILM115	DILM150
	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1	1
	800	800	800	800	800	–	–	–	–
	800	800	800	800	800	–	–	–	–
	300	300	300	300	300	–	–	–	–
	35	63	63	80	125	160	160	250	250
	35	35	50	63	80	160	160	–	–
	–	–	–	–	–	–	–	–	–
	100	125	125	160	250	250	250	250	250
	50	63	80	80	100	200	200	–	–
	–	–	–	–	–	–	–	–	–
	40	40	55	65	80	125	125	155	155
	40	40	63	80	80	125	125	160	180
	20	24	34	34	56	80	80	100	100
	19.6	19.6	32.2	46	57.5	68	68	110	136
	28	28	40	50	68	68	68	110	136
	25.3	32.2	32.2	48.3	62.1	78.2	78.2	120	120
	22	28	42	54	68	80	104	130	154
	21	27	40	52	65	77	96	124	156
	22	27	41	52	62	77	99	99	125
	127	162	232	290	365	435	580	725	870
	116	145	218	290	363	435	543	725	908
	116	146	232	290	348	434	580	580	726
	2	3	3	3	5	7½	7½	10	10
	3	5	5	7½	10	15	15	25	25
	5	5	7½	10	15	15	15	25	30
	7½	10	10	15	20	25	25	40	40
	10	10	15	20	25	30	40	50	60
	15	20	30	40	50	60	75	100	125
	20	25	40	50	60	75	100	100	125
	–	–	–	–	–	76	76	110	110
	–	–	–	–	–	89	89	106	106
	2	3	5	7½	10	10	10	15	15
	5	5	10	15	20	25	25	30	30

## Contactors

DILEM(4) DILMP20 DILM7 DILM9 DILM12 DILM17

### UL/CSA - Special Purpose

#### Lighting ratings

			DILEM(4)	DILMP20	DILM7	DILM9	DILM12	DILM17
Electrical discharge lamps (Ballast)								
Three phase, 60Hz	480V	[A]	—	20	12	18	20	27
	600V	[A]	—	20	12	18	20	27
Two phase, 60Hz	277V	[A]	—	20	12	18	20	27
	347V	[A]	—	20	12	18	20	27
Incandescent lamps (Tungsten)								
Three phase, 60Hz	480V	[A]	—	14	8	11	14	23
	600V	[A]	—	14	8	11	14	23
Two phase, 60Hz	277V	[A]	—	14	8	11	14	23
	347V	[A]	—	14	8	11	14	23

#### Resistance heating ratings

Three phase, 60Hz	480V	[A]	—	20	12	18	20	27
	600V	[A]	—	20	12	18	20	27
Two phase, 60Hz	277V	[A]	—	20	12	18	20	27
	347V	[A]	—	20	12	18	20	27

#### Refrigeration ratings (CSA only)

Locked rotor amperes (LRA)								
Three phase, 60Hz	480V	[A]	—	60	60	60	60	240
	600V	[A]	—	60	60	60	60	180
3 - pole break								
Three phase, 60Hz	480V	[A]	—	10	6	7.5	10	23
	600V	[A]	—	10	6	7.5	10	17

#### Elevator ratings

Three phase, 60Hz, Amperes								
	200V	[A]	—	7.8	3.7	7.8	7.8	11
	240V	[A]	—	6.8	6.0	6.8	6.8	9.6
	480V	[A]	—	11	3.4	4.8	11	11
	600V	[A]	—	9.6	3.9	6.1	9.6	11
Three phase, 60Hz, Horsepower								
	200V	[HP]	—	2	¾	2	2	3
	240V	[HP]	—	2	1½	2	2	3
	480V	[HP]	—	7½	2	3	7½	7½
	600V	[HP]	—	7½	3	5	7½	10

	DILM25	DILM32	DILM40	DILM50	DILM65	DILM80	DILM95	DILM115	DILM150
	35	40	63	79	88	85	100	136	160
	35	40	63	79	88	85	100	136	160
	35	40	63	79	88	85	100	136	160
	35	40	63	79	88	85	100	136	160
	32	40	55	74	88	85	100	136	160
	32	40	55	74	88	85	100	136	160
	32	40	55	74	88	85	100	136	160
	32	40	55	74	88	85	100	136	160
	35	40	63	79	88	94	110	136	160
	35	40	63	79	88	94	110	136	160
	35	40	63	79	88	94	110	136	160
	35	40	63	79	88	94	110	136	160
	240	240	270	270	270	540	540	540	540
	180	180	270	270	270	420	420	540	540
	32	40	26	36	45	63	70	84	90
	24	30	26	36	45	63	70	84	90
	11	25.3	25.3	32.2	32.2	62.1	62.1	92	92
	15.2	22	28	42	42	68	80	104	104
	14	27	34	40	40	65	77	96	96
	17	22	32	41	41	62	77	99	99
	3	7½	7½	10	10	20	20	30	30
	5	7½	10	15	15	25	30	40	40
	10	20	25	30	30	50	60	75	75
	15	20	30	40	40	60	75	100	100

<b>Capacitor Switching Contactors</b>				<b>DILK12</b>	<b>DILK20</b>	<b>DILK25</b>	<b>DILK33</b>	<b>DILK50</b>	
<b>Main Contacts (cont.)</b>									
Making capacity cos φ to IEC/EN 60-947 up to 690V				[A]	144	238	384	560	910
Breaking capacity cos φ = 0.35, AC, 50 – 60Hz									
	200V		[A]	–	–	–	–	–	
	230V		[A]	–	–	–	–	–	
	200...230V		[A]	–	–	–	–	–	
	220...230V		[A]	120	170	320	400	650	
	380...400V		[A]	120	170	320	400	650	
	460V		[A]	–	–	–	–	–	
	500V		[A]	100	170	320	400	650	
	575V		[A]	–	–	–	–	–	
	660...690V		[A]	70	120	180	250	370	
	1000V		[A]	–	–	–	–	–	
<b>Short circuit rating</b>									
Max. fuse									
Type "2"	400V	gG/gL 500V	[A]	20	25	63	63	125	
	690V	gG/gL 690V	[A]	20	25	35	50	80	
	1000V	gG/gL 1000V	[A]	–	–	–	–	–	
Type "1"	400V	gG/gL 500V	[A]	35	63	125	125	250	
	690V	gG/gL 690V	[A]	25	50	63	80	100	
	1000V	gG/gL 1000V	[A]	–	–	–	–	–	
<b>UL/CSA Ratings</b>									
Continuous current rating									
50/60Hz, 3-pole	Open		[A]	20	35	40	55	80	
	Enclosed		[A]	18	32	36	50	72	
Capacitive switching ratings									
Three phase, 60Hz, Amperes									
	240V		[A]	18	28	36	48	72	
	480V		[A]	18	28	36	48	72	
	600V		[A]	14.4	28	38.4	48	72	
Three phase, 60Hz, kVAR									
	240V		[kVAR]	7.5	12	15	20	30	
	480V		[kVAR]	15	20	30	40	60	
	600V		[kVAR]	15	30	40	50	75	
<b>IEC Capacitor Duty Ratings</b>									
Group compensation motor rating of three phase capacitors									
	230V		[kVAR]	7.5	11	15	20	25	
	400V		[kVAR]	12.5	20	25	33.3	50	
	525V		[kVAR]	16.7	25	33.3	40	65	
	690V		[kVAR]	20	33.3	40	55	85	