

## LOADLIMITER 63 MODULAR CONTACTOR

### Main Features

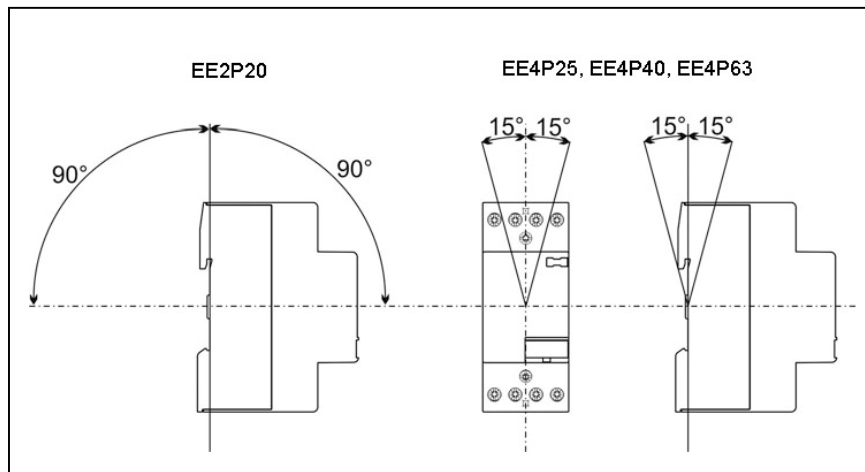
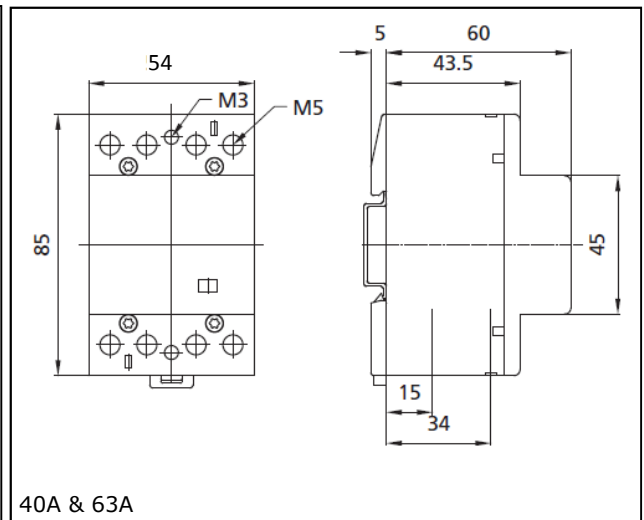
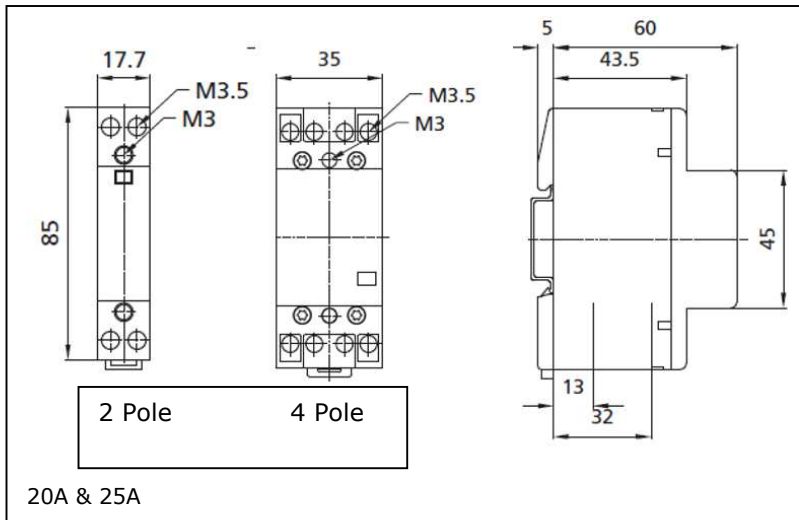
- Meets the requirements of EN 61095
- DIN-rail mountable
- May require de-rating when used with inductive loads - please see tables below.

### CATALOGUE NUMBERS

Current Rating (A)	No. of Poles	Contact Status	Product Code
20	2	Normally Open	EE2P20CO
20	2	Normally Closed	EE2P20CC
25	4	Normally Open	EE4P25CO
25	4	Normally Closed	EE4P25CC
40	4	Normally Open	EE4P40CO
40	4	Normally Closed	EE4P40CC
63	4	Normally Open	EE4P63CO
63	4	Normally Closed	EE4P63CC
Ventilation Kit	9mm wide	-	LLMV *



\*Ventilation module must be fitted between alternate pairs of contactors to prevent overheating.



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### Technical Data

Type					EE2P20	EE4P25	EE4P40	EE4P63	
Standards					IEC/EN 61095, IEC/EN 60947-4-1, IEC/EN 60947-5-1				
Module width					1	2	3	3	
Mechanical endurance				op. c.	3 x 10 <sup>4</sup>				
Ambient temp.				°C	-5 ... +55				
Storage temp.				°C	-30 ... +80				
No. of contactors (side-by-side)		≤40 °C 40 - 55 °C			max. 3 max. 2	no limitation	max. 3 max. 2	max. 3 max. 2	
Contact reliability					17 V; ≤50 mA				
General	Min. distance of open contacts			mm	3.6				
	Power dissipation per pole			W	1.7	2.2	4	8	
	Overload current withstand capability			A	72	68	176	240	
	Max. back-up fuse for short-circuit protection gl. Coordination type 2			lv A	20	25	63	80	
		DC-1					300		
	Max. operating frequency	AC-1/AC-3/AC-5b/AC-6b			op. c./h		600		
		AC-15					1,200		
		no load					3,000		
	Weight				kg	0.13	0.24	0.42	0.42
	Rated insulation voltage			Ui	V	230	440	400	400
Rated impulse withstand voltage			Uimp	kV	4				
Thermal current			ith	A	20	25	40	63	
Rated operational voltage			Ue	V	230	400			
Rated frequency			f	Hz	50/60				
Rated operational current	AC-1/AC-7a		le	A	20	25	40	63	
Operational power AC-1/AC-7a	1-pole	230 V			4	5.4	8.7	13.3	
	3-pole	230 V	Pe	kW	-	9	16	24	
	3-pole	400 V			-	16	26	40	
Electrical endurance	AC-1/AC-7a			op. c.	200,000	100,000			
Rated operational current	AC-3/AC-7b		le	A	9	8.5	22	30	
Operational power	1-phase motor	230 V			1.3 only for NO <sup>0</sup>	1.3 <sup>1</sup>	3.7 <sup>1</sup>	5 <sup>1</sup>	
	AC-3/AC-7b	3-phase motor	230 V	Pe	kW	-	2.2	5.5	8.5
	3-phase motor	400 V			-	4	11	15	
Electrical endurance	AC-3/AC-7b			op. c.	300,000	500,000	150,000	150,000	
Switching of capacitors	AC-6b	230 V	C	QF	30	36	220	330	
Electrical endurance	AC-6b			op. c.	200,000	100,000			
Main Circuit	Rated operational current	DC-1							
	1-pole	U	e = 24 V DC			20	25	40	63
		U	e = 110 V DC	le	A	6	6	4	4
		U	e = 220 V DC			0.6	0.6	1.2	1.2
	2-poles connected in series	U	e = 24 V DC			20	25	40	63
		U	e = 110 V DC	le	A	10	10	10	10
		U	e = 220 V DC			6	6	8	8
	3-poles connected in series	U	e = 24 V DC			-	25	40	63
		U	e = 110 V DC	le	A	-	20	30	35
		U	e = 220 V DC			-	15	20	30
	4-poles connected in series	U	e = 24 V DC			-	25	40	63
		U	e = 110 V DC	le	A	-	20	40	63
U		e = 220 V DC			-	15	40	63	
Electrical endurance	DC-1			op. c.	100000				
Terminal capacity		rigid		mm <sup>2</sup>	1.5 ... 2.5				
		flexible			1.5 ... 1.6				
Screw					M3,5	M5			
Screw head					PZ1	PZ2			
Tightening torque				Nm	1.2	3.5			

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Type					EE2P20	EE4P25	EE4P40	EE4P63
Auxiliary Contacts	Rated operational voltage		Ue	V	230		400	
	Rated insulated voltage		Ui	V	230		440	
	Rated impulse withstand voltage		Uimp	kV			4	
	Thermal current		Ith	A	20	25	40	63
	AC-15 Rated	1-phase	230 V	Ie	A	6	6	6
	Operational Current	1-phase	400 V			-	4	4
Electrical endurance	AC-15		op. c.		300,000	500,000	150,000	150,000
Range of control voltage			Uc	%		85 ... 110		
Control voltage			Uc	V		230		
Surge immunity test (1.2/50 Qs), acc. to IEC/EN 61000-4.5				kV		2		
Control Circuit	Coil consumption		switch-on operation	VA/W	12/10 2.8/1.2	33/25 5.5/1.6	5/5 5/5	5/5 5/5
	Make/break delays		make break	ms	15_25 10_30	10_30 10_30	15_20 35_45	15_20 35_45
	Terminal capacity		rigid flexible	S			1 ... 2.5 1 ... 2.5	
	Screw						M3,5	M3
	Screw head							PZ1
	Tightening torque				Nm			0.6

### Switching of Lamps

Max. number of lamps per pole at 230 V 50 Hz

Type	Power (W)	Current (A)	C (QF)	EE2P20	EE4P25	EE4P40	EE4P63
Incandescent lamps (tungsten filament)	60	0.26	-	33	33	65	85
	100	0.44	-	20	20	40	50
	200	0.87	-	10	10	20	25
	500	2.17	-	3	3	8	10
	1000	4.35	-	1	1	4	5
Incandescent lamps uncompensated or series compensated	18	0.37	2.7	22	24	90	140
	24	0.35	2.5	22	24	90	140
	36	0.43	3.4	17	20	65	95
	58	0.67	5.3	14	17	45	70
Incandescent lamps lead-lag circuit	2 x 18	0.11	-	2 x 30	2 x 40	2 x 100	2 x 150
	2 x 24	0.14	-	2 x 24	2 x 31	2 x 78	2 x 118
	2 x 36	0.22	-	2 x 17	2 x 24	2 x 65	2 x 95
	2 x 58	0.35	-	2 x 10	2 x 14	2 x 40	2 x 60
Incandescent lamps parallel compensated	18	0.12	4.5	7	8	48	73
	24	0.15	4.5	7	8	48	73
	36	0.00	4.5	7	8	48	73
	58	0.32	7	4	5	31	47
Flourescent lamps with electronic ballast units (EVG)	18	0.09	-	25	35	100	140
	36	0.16	-	15	20	52	75
	58	0.25	-	14	19	50	72
	2 x 18	0.17	-	2 x 12	2 x 17	2 x 50	2 x 70
	2 x 36	0.32	-	2 x 7	2 x 10	2 x 26	2 x 38
2 x 58	0.49	-	2 x 7	2 x 9	2 x 25	2 x 36	
High-pressure mercury-vapour lamps. Uncompensated	50	0.61	-	14	18	38	55
	80	0.01	-	10	13	29	42
	125	1.15	-	7	9	20	29
	250	2.15	-	4	5	10	15
	400	3.25	-	2	3	7	10
	700	0.05	-	1	2	4	6
1000	0.08	-	1	1	3	4	
High-pressure mercury-vapour lamps. Parallel compensated	50	0.28	7	4	5	31	47
	80	0.41	8	4	5	27	41
	125	0.65	10	3	4	22	33
	250	1.22	18	1	2	12	18
	400	1.95	25	1	1	9	13
	700	3.45	45	-	-	5	7
1000	0.05	60	-	-	4	5	

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Type	Power (W)	Current (A)	C (QF)	EE2P20	EE4P25	EE4P40	EE4P63
Halogen metal-vapour lamps. Uncompensated	35	0.53	-	18	22	43	60
	70	0.01	-	10	12	23	32
	150	0.02	-	5	7	12	18
	250	0.03	-	3	4	7	10
	400	0.04	-	3	3	6	9
	1000	0.10	-	1	1	2	3
	2000	16.5	-	-	-	1	1
Halogen metal-vapour lamps. Parallel compensated	35	0.25	6	5	6	36	50
	70	0.45	12	2	3	18	25
	150	0.75	20	1	1	11	15
	250	0.02	33	-	1	6	9
	400	0.03	35	-	1	6	8
	1000	0.06	95	-	-	2	3
	2000	0.12	148	-	-	1	2
Halogen metal-vapour lamps with electronic ballast unit PCI 50-125 x ln lamp for 0.6 ms	20	0.00	integrated	9	9	18	20
	35	0.00	integrated	6	6	11	13
	70	0.36	integrated	5	5	10	12
	150	0.01	integrated	4	4	8	10
Transformers for halogen metal-vapour lamps	20	-	-	40	52	110	174
	50	-	-	20	24	50	80
	75	-	-	13	16	35	54
	100	-	-	10	12	27	43
	150	-	-	7	9	19	29
	200	-	-	5	6	14	23
	300	-	-	3	4	9	14
High-pressure sodium-vapour lamps. Uncompensated	150	0.02	-	5	6	17	22
	250	0.03	-	3	4	10	13
	400	0.05	-	2	2	6	8
	1000	10.3	-	-	1	3	3
High-pressure sodium-vapour lamps. Parallel compensated	150	0.83	20	1	1	11	16
	250	0.02	33	-	1	6	10
	400	0.02	48	-	-	4	6
	1000	0.06	106	-	-	2	3
Halogen metal-vapour lamps with electronic ballast unit PCI 50-125 x ln lamp for 0.6 ms	20	0.00	integrated	9	9	18	20
	35	0.00	integrated	6	6	11	13
	70	0.36	integrated	5	5	10	12
	150	0.01	integrated	4	4	8	10
Low-pressure sodium-vapour lamps. Uncompensated	18	0.35	-	22	27	71	90
	35	0.02	-	7	9	23	30
	55	0.02	-	7	9	23	30
	90	0.02	-	4	5	14	19
	135	0.04	-	3	4	10	13
	180	0.03	-	3	4	10	13
Low-pressure sodium-vapour lamps. Compensated	18	0.35	5	6	7	44	66
	35	0.31	20	1	1	11	16
	55	0.42	20	1	1	11	16
	90	0.63	26	1	1	8	12
	135	0.94	45	-	-	5	8
	180	1.16	40	-	-	4	7
LUMILUX* Fluorescent lamps T5 with electronic ballast unit (EVG)	22	0.11		22	30	80	110
	40	0.21	FC	12	15	40	60
	55	0.28		8	12	30	45
	14	0.08		30	40	105	150
	21	0.11	HE	22	30	80	115
	28	0.14		18	22	60	90
	35	0.18		14	18	48	70
	24	0.12		20	26	70	100
	39	0.20		12	16	42	62
	49	0.24	HO	10	14	35	52
	54	0.27		9	13	32	47
	80	0.39		6	8	22	32
	2 x 22	0.23		2 x 11	2 x 15	2 x 40	2 x 55
	2 x 40	0.42	2 x FC	2 x 6	2 x 7	2 x 20	2 x 30
	2 x 55	0.55		2 x 4	2 x 6	2 x 15	2 x 22
	2 x 14	0.15		2 x 15	2 x 20	2 x 52	2 x 75
	2 x 21	0.22	2 x HE	2 x 11	2 x 15	2 x 40	2 x 57
	2 x 28	0.28		2 x 9	2 x 11	2 x 20	2 x 45
	2 x 35	0.36		2 x 7	2 x 9	2 x 24	2 x 35
	2 x 24	0.24		2 x 10	2 x 13	2 x 35	2 x 50
	2 x 39	0.39		2 x 6	2 x 8	2 x 21	2 x 31
	2 x 49	0.48	2 x HO	2 x 5	2 x 7	2 x 17	2 x 26
	2 x 54	0.54		2 x 4	2 x 6	2 x 16	2 x 23
	2 x 80	0.74		2 x 3	2 x 4	2 x 11	2 x 16

\* Lumilux is a trademark of OSRAM GmbH