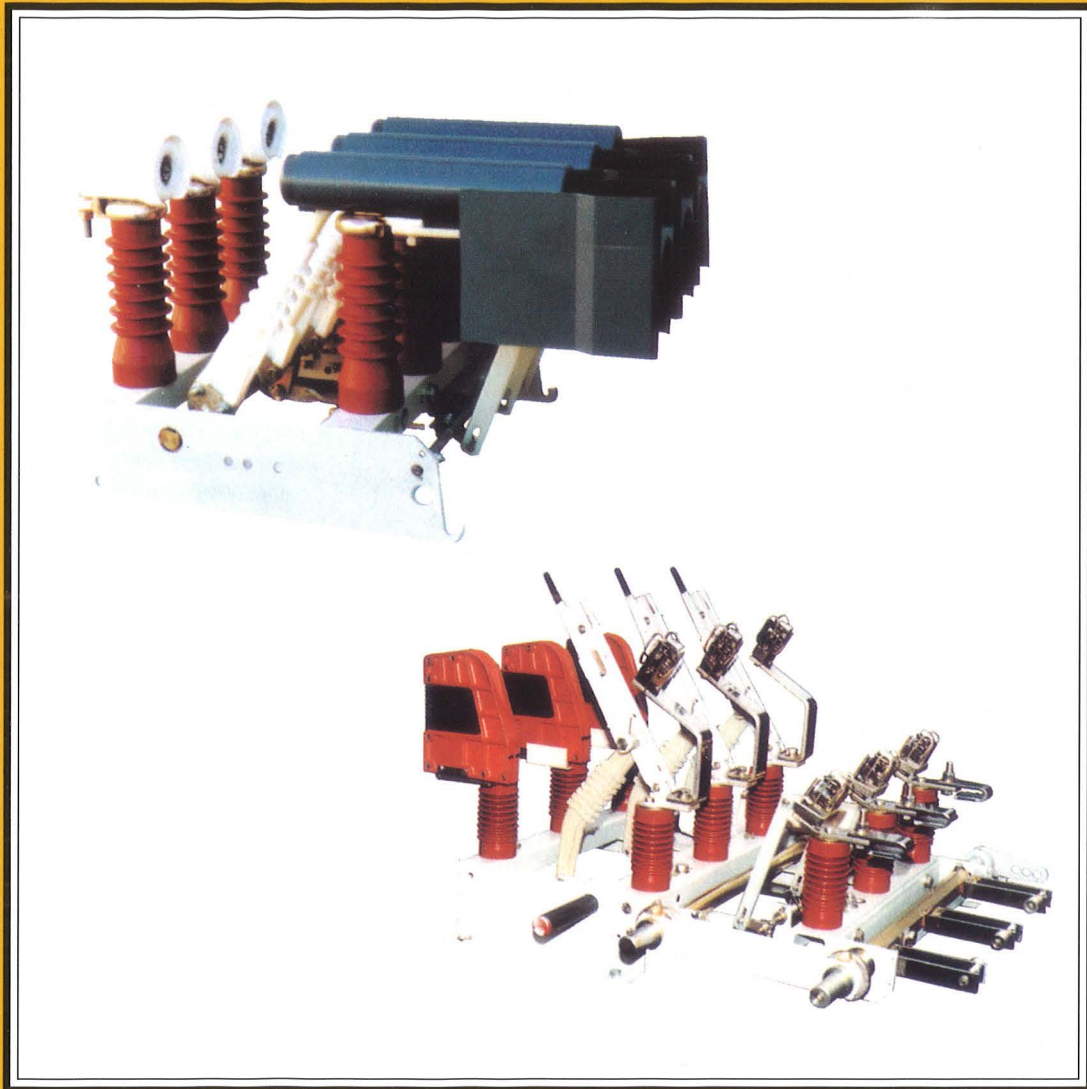


# **RITA**

**LOAD BREAK SWITCHES  
TYPE RL 12 AND RL 24  
TYPE RLN-12 RLN-24 AND RLN-38  
DISCONNECTING SWITCHES  
TYPE RD 12 AND RD 24**

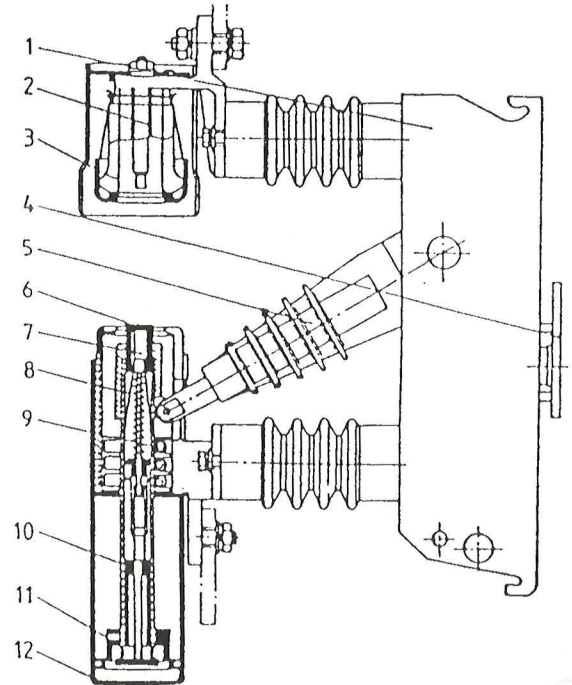


*Compression switch-disconnectors are switching devices intended for indoor metal-enclosed switchgears for breaking rated currents and for a visible isolation of the circuit. They are built and tested according to the standards IEC 265 and VDE 0670.*

*The principle of extinguishing electric arc is performed by a blast of compressed air produced by a switch itself while opening.*

They are distinguished particularly by:

- reliable high making and breaking capacities; they are capable of breaking currents of transformers, capacitors and lines in load or no-load conditions,
- making short-circuit capacities of a built-in earthing switch,
- small dimensions for voltages 12 KV and 24 KV, distance between pole centres 150 mm and 210 mm,
- a simple installation in different positions,
- direct operation by means of a lever which is not removable until the operation cycle is finished, e.g. the mechanism with tripping device shall be strained after the closing action,
- closing action of a built-in earthing switch with mechanical push-button locked with a key different from that of the switch-disconnector,
- a possibility of tripping-closing the earthing switch by means of a flap at the top of a panel for relieving gases occurring with an open arc in a panel,
- use of an insulating protection plate with a switch-disconnector open with a possibility of covering the complete surface of a panel between the open contacts according to the standard IEC 298,
- possibility of building-in different elements;
  - a) HRC fuses for breaking and making short-circuit currents
  - b) earthing switch for earthing and making short-circuit current
  - c) electric shunt-release of all standard D.C. and A.C. voltages for remote opening of the switch-disconnector
  - d) electric shunt-releases for a remote closing of an earthing switch
  - e) auxiliary switch for control and position indication of a switch-disconnector with 2a and 2b contacts each way.



- 1 Switch-disconnector framework
- 2 Arcing contact-fixed
- 3 Tulip contact
- 4 Toggle-spring mechanism
- 5 Insulation moving lever
- 6 Quenching nozzle
- 7 Arcing contact-moving
- 8 Sliding auxiliary contact
- 9 Contact roller
- 10 Main sliding tube contact
- 11 Piston
- 12 Pressure cylinder

Thus, the compression switch-disconnectors are distinguished by a possibility of building safe and reliable switchgears in accordance with the IEC Standard 298 what is especially important for the operating staff.

**TECHNICAL DATA**

Type	Distance between pole centres p(mm)	Un (KV)	Uw (KV)	Rated lightning impulse		Rated min. power frequency		In (A)	I1 (A)	I2 (A)	I3 (A)	I6 (A)	I <sub>ma</sub> (KA)	I <sub>dyn</sub> (KA)	I <sub>th</sub> (KA)	Fuse Max (A)
				Withstand voltage		withstand voltage										
				across isolating distance	to earth and between poles	across isolating distance	to earth and between poles									
RL 12/630	150	12	75	85	75	32	28	630	630	630	90	25	50	50	20	200
RL 24/630	210	24	125	145	125	60	50	630	630	630	90	25	40	50	20	125
RD 12/630	150	12	75	85	75	32	28	630	630	630	90	25	50	50	20	—
RD 24/630	210	24	125	145	125	60	50	630	630	630	90	25	40	50	20	—

I<sub>ma</sub> : also for a built-on earthing switch with short circuit making capacity

Shunt-release : AC 110/220v ± 15% 60Hz  
DC or other voltage on special order.

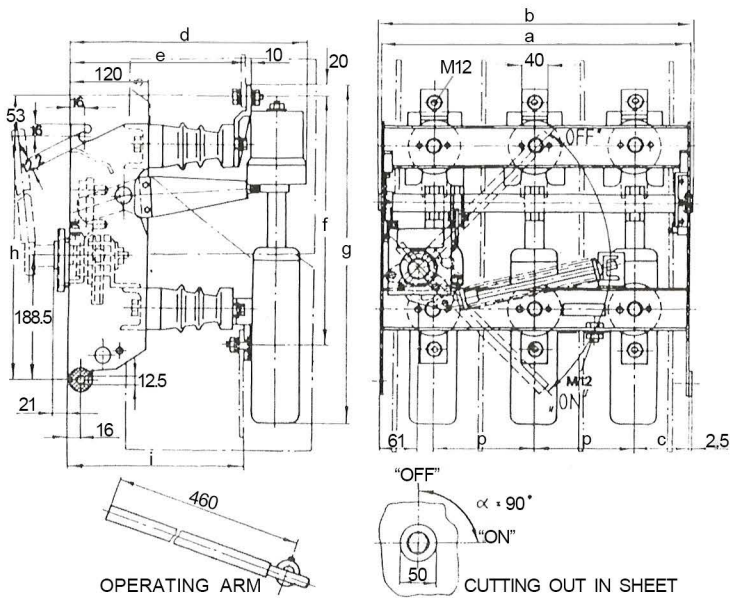
- I1 rated breaking capacity
- I2 rated closed loop breaking capacity
- I3 rated transformer off-load breaking capacity
- I6 rated cable charging breaking capacity
- I<sub>ma</sub> rated short-circuit making capacity
- I<sub>dyn</sub> rated peak withstand current
- I<sub>th</sub> rated short-time current

**Explanation of symbols:**

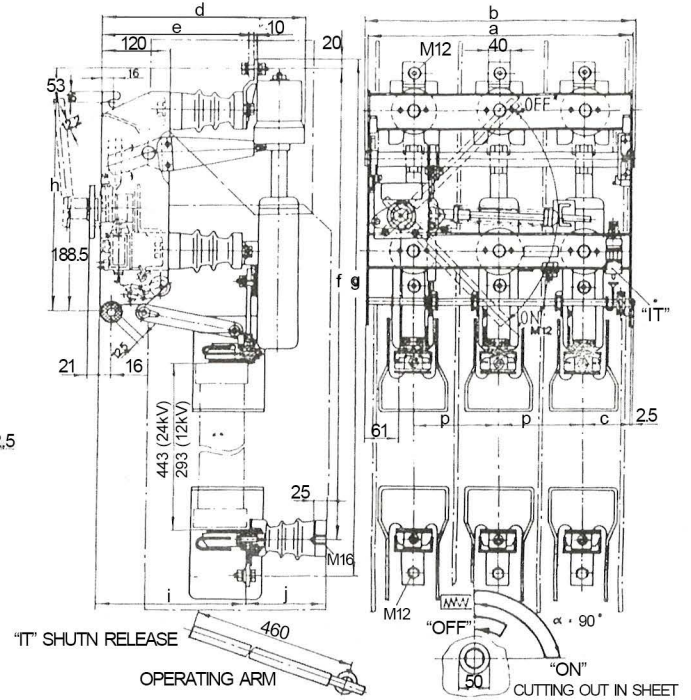
- Un rated voltage
- Uw rated impulse withstand voltage
- In rated current

# DIMENSIONS:

## RD 12/RD 24



## RL 12/RL 24



Un (kv)	Type	p	a	b	c	d	e	f	g	h	i	j
12	RD12/630	150	480	482	90	433	340	430	628	445	344	-
	RL12/630	150	480	482	90	433	340	955	1040	445	338	219
24	RD24/630	210	665	667	122.5	433	340	430	628	445	344	-
	RL24/630	210	665	667	122.5	433	340	1105	1190	445	338	219

## RLN-12/RLN-24/RLN-38

IEC 265 VDE0670	Distance between pole centres	Un	Rated insulation level	Rated lightning impulse Withstand voltage		Rated min. power frequency withstand voltage											
				Across isolating distance	To earth and between poles	Across isolating distance	To earth and between poles	In	I1	I2	I3	I6	I <sub>ma</sub>	I <sub>th</sub>			
				kV	kV	kV	kV	I <sub>N</sub>	I <sub>LN</sub>	I <sub>L200</sub>	I <sub>L3</sub>	I <sub>R20</sub>	I <sub>T20</sub>	I <sub>C20</sub>	I <sub>e</sub>	I <sub>dyn</sub>	I <sub>th</sub>
Type	mm	kV	kV	kV	kV	kV	kV	A	A	A	A	A	A	kA	kA	kA	
RLN-12/630(F)	210	12	12 Si 28/75	85	75	32	28	630	630	100	1000	630	50	25	75	75	30
RLN-12/1250	210							1250	1250	100	1500	1250	50	25	75	75	50
RLN-12/1600	275							1600	1250	100	2000	1250	50	25	90	125	50
RLN-24/630(F)	275	24	24 Si 50/125	145	125	60	50	630	630	100	800	630	16	25	50	50	20
RLN-24/1250	320							1250	1000	100	1100	1000	16	25	50	75	30
RLN-38/630(F)	360	38	38 Si 70/170	195	170	80	70	630	630	50	75	630	16	25	50	50	30
RLN-38/1250	360							1250	800	50	920	800	16	25	50	75	30

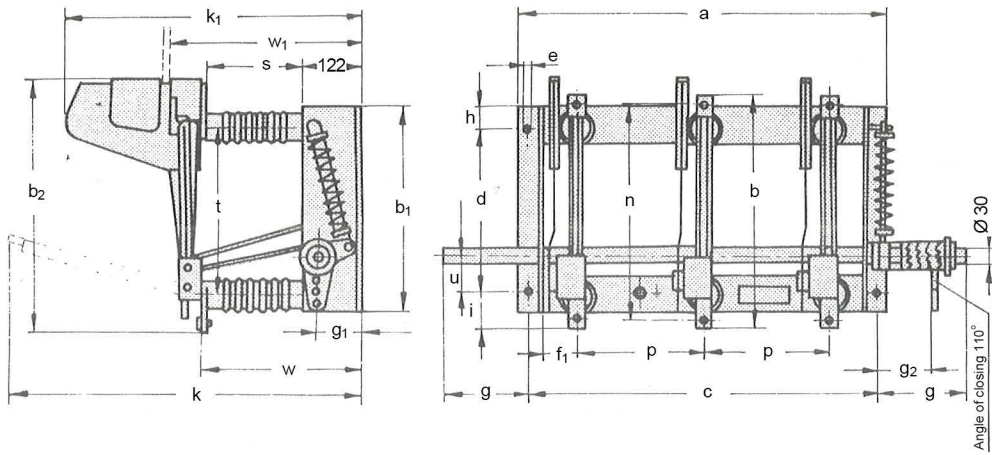
F: WITH FUSE HOLDER

### Explanation of symbols:

IEC 265	VDE 0670	
U <sub>n</sub>	U <sub>n</sub>	Rated voltage
I <sub>n</sub>	I <sub>N</sub>	Rated current
I <sub>1</sub>	I <sub>LN</sub>	Rated mainly active load breaking capacity
	I <sub>L200</sub>	Breaking capacity at p.f.=0,7 and 200 C-O operations
	I <sub>L3</sub>	Breaking capacity at p.f.=0,7 and 3 C-O operations

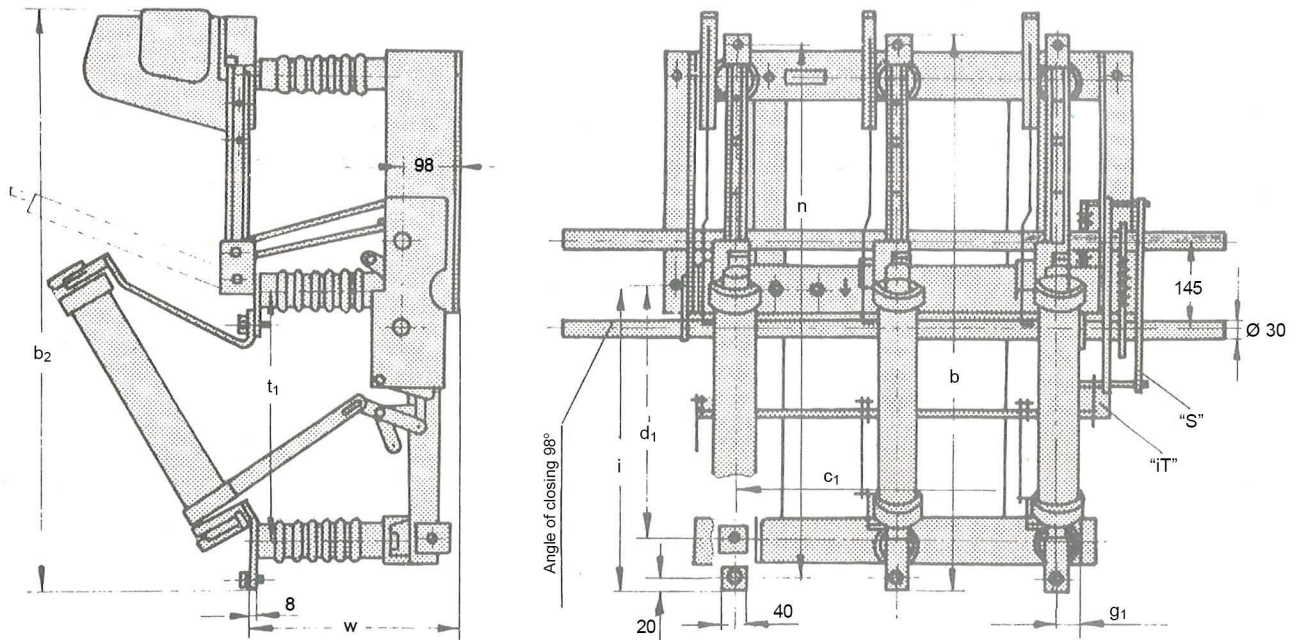
I <sub>2</sub>	I <sub>R20</sub>	Rated closed loop breaking capacity
I <sub>3</sub>	I <sub>T20</sub>	Rated transformer off-load breaking capacity
I <sub>6</sub>	I <sub>C20</sub>	Rated cable charging breaking capacity
I <sub>ma</sub>	I <sub>e</sub>	Rated short circuit making capacity
	I <sub>dyn</sub>	Rated peak withstand current
I <sub>th</sub>	I <sub>th</sub>	Rated short-time current

**DIMENSIONS: RLN SERIES**

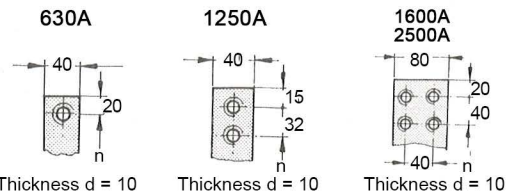


Type	mm																					
	p	a	b	b <sub>1</sub>	b <sub>2</sub>	c	d	e	f <sub>1</sub>	g	g <sub>1</sub>	g <sub>2</sub>	h	i	k	k <sub>1</sub>	n	s	t	n	w	w <sub>1</sub>
RLN-12/630	210	640	423	350	467	600	280	15	64	150	98	90,5	35	73	600	460	383	130	290	65	267	335
RLN-12/1250	210	640	482	355	496	600	280	17	68	150	98	90,5	37,5	102	600	460	388	130	290	65	272	342
RLN-12/1600	275	790	602	440	640	750	350	17	72	190	98	90,5	45	135	616	460	482	130	360	75	277	322
RLN-12/2500	275	790	602	440	640	750	350	17	72	190	98	90,5	45	135	616	460	482	130	360	75	277	322
RLN-24/630	275	790	503	440	547	750	350	15	64	190	98	133,5	45	83	776	615	463	210	360	75	347	415
RLN-24/1250	320	890	565	440	579	850	350	17	72	190	98	133,5	45	115	779	615	471	210	360	75	352	422
RLN-38/630	360	960	643	580	687	920	450	15	64	250	98	205,5	65	103	985	735	603	300	500	55	437	505
RLN-38/1250	400	1040	705	580	719	1000	450	17	72	250	98	205,5	65	135	995	735	611	300	500	55	442	512

**• RLN-12/630F • RLN-24/630F • RLN-38/630F**



kV	Type	mm									
		p	b	b <sub>2</sub>	c <sub>1</sub>	d <sub>1</sub>	g <sub>1</sub>	i	n	t <sub>1</sub>	w
12	RLN-12/630F	210	716	760	420	300	44	366	676	293	265
24	RLN-24/630F	275	930	974	520	420	44	510	890	427	345
38	RLN-38/630F	360	1150	1194	700	450	44	610	1110	507	390



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