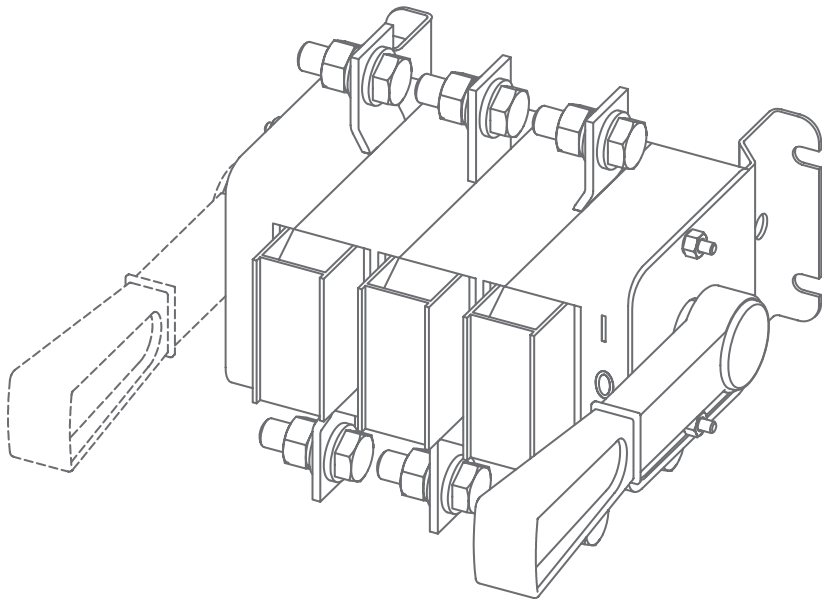




**EKF**



Switch disconnecter  
VR32U EKF MAXima

## 1. PURPOSE

Switch disconnectors VR32U EKF MAXima (universal) are designed for manual on-off AC circuits with rated voltage not over than 690V and a frequency 50Hz .

The design incorporates 3 -pole contact system blade type with double visible break of the circuit. A double break of the circuit, a big opening of contacts and arc chute provide effective electric arc quenching under switching loads that prevents premature and excessive wear of contacts.

Design of the nodes provides bolted connection of bus bars or conductors terminated with a cable lug.

All switch disconnectors are universal by their type of the handle connection. Design of the switch disconnector provides the installation of the handle both to the right of the body and to the left. Handle location, left or right, can be changed during operation if necessary.

Location of the plane of nodes external terminals connection is perpendicular to the plane of the mounting with the arc chutes.

There are several production versions of VR32U EKF MAXima :

- Single and two directions
- with fixed handle
- with detachable shifted handle.

## 2. TECHNICAL CHARACTERISTICS

VR32U – XX X X X X X X X

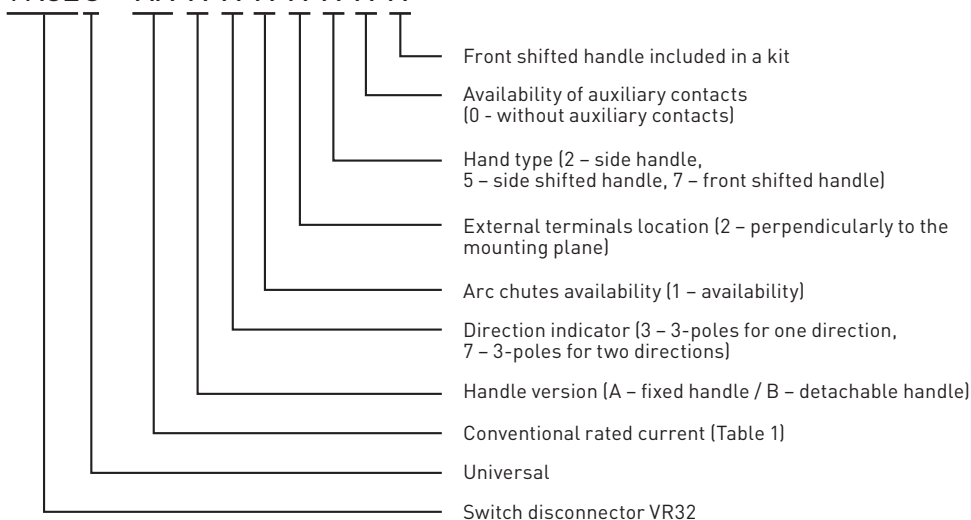


TABLE 1

Conventional rated current, A	Reference designation
100	31
250	35
400	37
630	39

TABLE 2

Parameters	Values			
Conventional thermal current outdoors I <sub>th</sub> , A	100	250	400	630
Rated short-time withstand current, kA	5	8	11	16
Rated conventional short circuit current, kA	8	14	22	32
Mechanical endurance, number of cycles, no less than	25000	25000	16000	16000
Section of connecting conductors, max mm <sup>2</sup>	35	120	240	2x240
Rated insulation voltage, U <sub>i</sub> , V	690			
Rated operating voltage, U <sub>e</sub> , V	400, 690			
Number of poles	3P			
Application categories	AC-21B, AC-22B (Arc chutes )			
Protection degree	IP00 IP32 (installation inside cabinet)			
Operating temperatures range, °C	от -60 до +40			
Climatic version	УХЛ3 (temperate cold)			
Altitude above sea level, m	up to 2000			
Service life, no less than, years	10			

TABLE 3

Current type	Application category	Typical range of application
AC	AC-21 B	Switching of resistive loads, including moderate overloads
	AC-22 B	Switching of mixed resistive and inductive loads, including moderate overloads

Production versions of switch disconnectors VR32U EKF MAXima:

TABLE 4

Name	Rated current, A	Directions	Version	Net mass, kg
VR32U-31A31220	100	1	With arc chutes, fixed handle	1,2
VR32U-35A31220	250	1		2,2
VR32U-37A31220	400	1		3,2
VR32U-39A31220	630	1		6,7
VR32U-31A71220	100	2		1,3
VR32U-35A71220	250	2		2,7
VR32U-37A71220	400	2		4,0
VR32U-39A71220	630	2		6,3
VR32U-31A31240-r	100	1	With arc chutes, detachable shifted handle	1,7
VR32U-35A31240-r	250	1		2,7
VR32U-37A31240-r	400	1		3,2
VR32U-39A31240-r	630	1		5,3
VR32U-31A71240-r	100	2		2,1
VR32U-35A71240-r	250	2		3,2
VR32U-37A71240-r	400	2		4,5
VR32U-39A71240-r	630	2		7,6

### 3. OVERALL DIMENSIONS

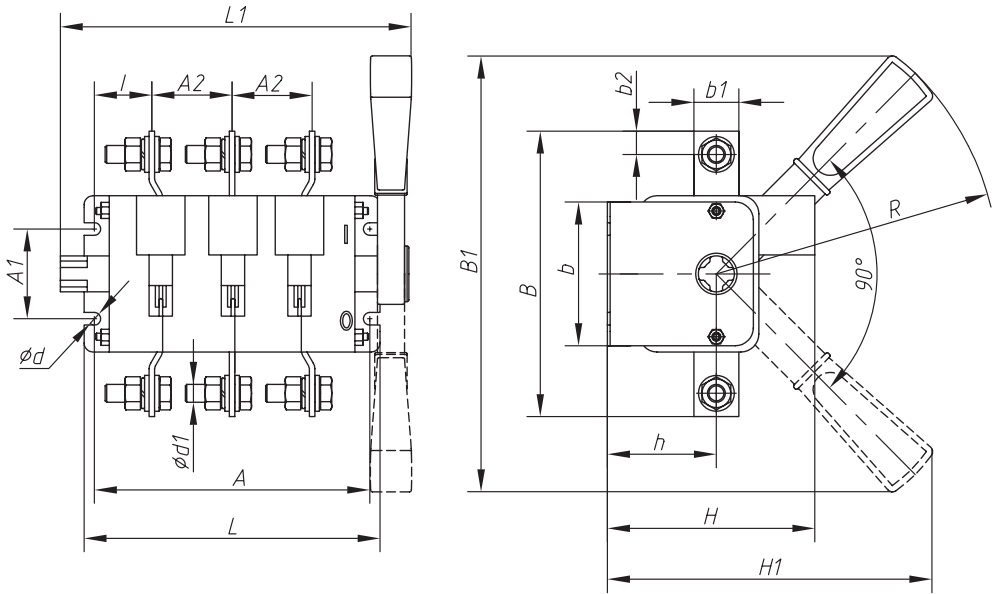


Fig. 1 - Universal switch disconnector 3-poles for one direction with arc chutes, fixed left/right handle

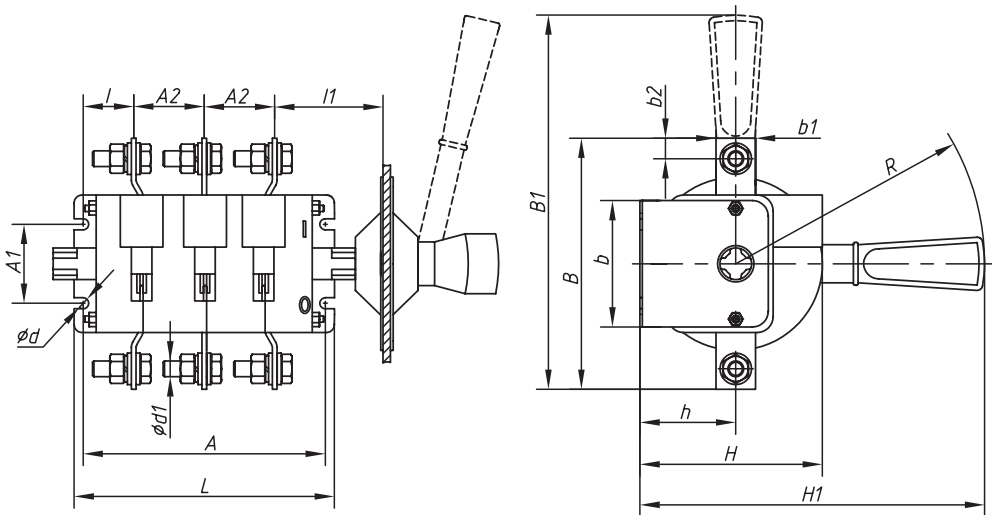


Fig. 2 - Universal switch disconnector 3-poles for one direction with arc chutes, detachable left/right handle

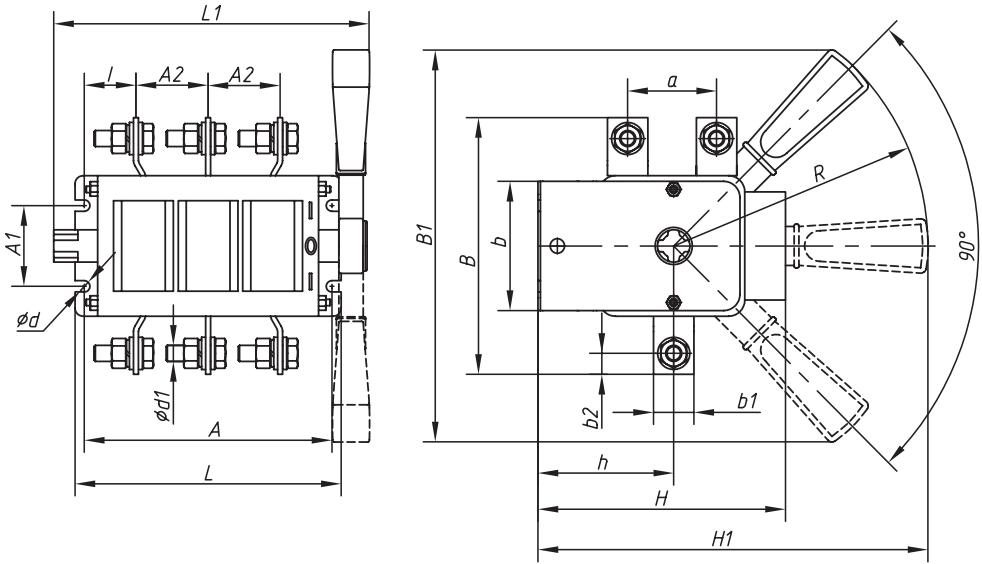


Fig. 3 - Universal switch disconnector 3-poles for two directions with arc chutes, fixed left/right handle

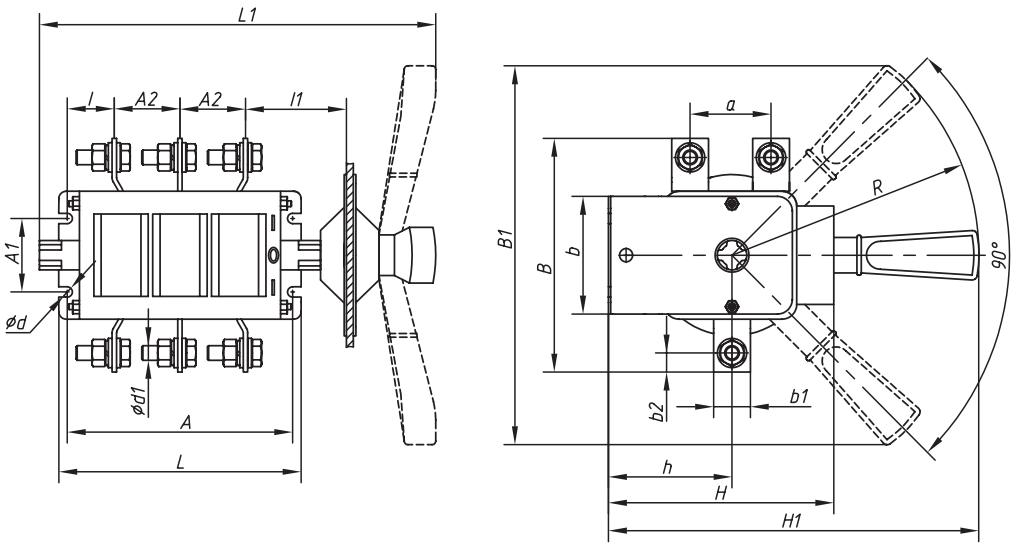


Fig. 4 - Universal switch disconnector 3-poles for two directions with arc chutes, detachable left/right handle

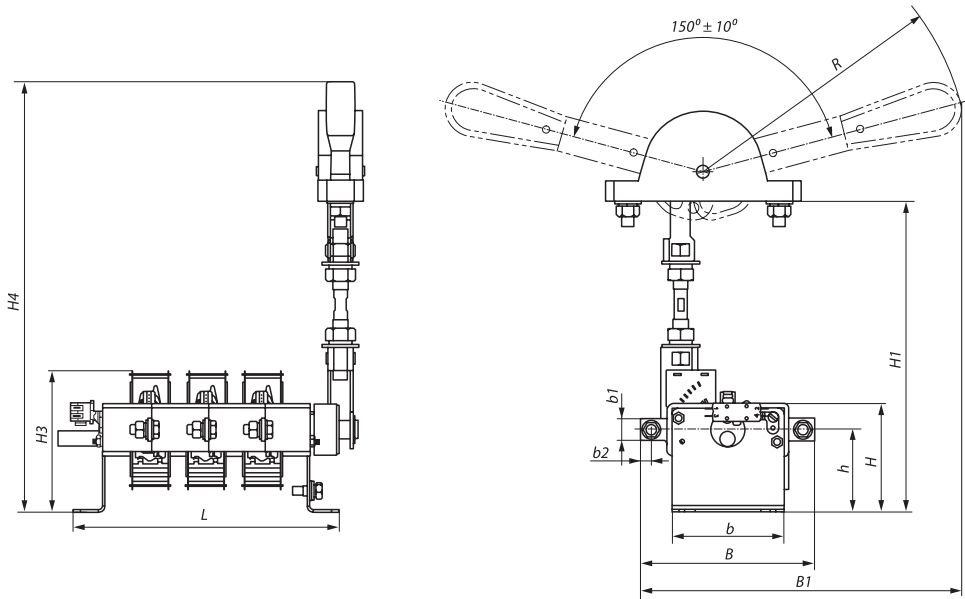


Fig. 5 - Universal switch disconnector 3-poles for one direction with arc chutes, fixed front offset left/right handle

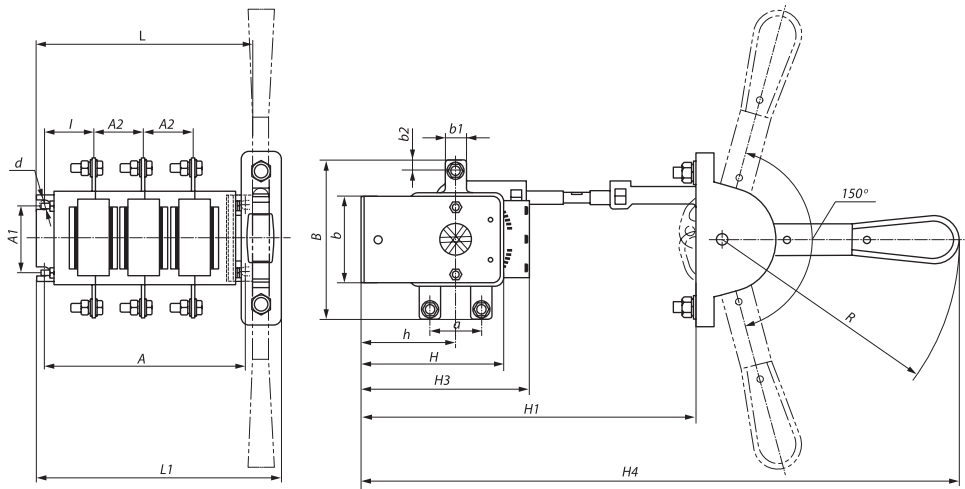


Fig. 6 - Universal switch disconnector 3-poles for two directions with arc chutes, fixed front offset left/right handle

TABLE 5

Model	Dimensions, mm											
	A	A1	A2	B	B1	L1	L	b	b1	b2	H	
VR32U-31A31220	162,5	50	37,5	117	240	176	176,5	75	15	7,5	110	
VR32U-31B31250					219	267						
VR32U-31A31240-R					231	202						
VR32U-35A31220	173,5	50	44	164	240	190	186	83	25	12,5	112	
VR32U-35B31250					242	282						
VR32U-35A31240-R					249	214						
VR32U-37A31220	203	50	50	178	240	215	214,5	99,5	26,5	13	124,5	
VR32U-37B31250					250	297,5						
VR32U-37A31240-R					244	240						
VR32U-39A31220	236,5	100	65	220	313	250	252,5	119	35	18	137,5	
VR32U-39B31250					320	332						
VR32U-39A31240-R					313	280						
VR32U-31A71220	145,5	50	37,5	120	240	168	157,5	65	15	7,5	127,5	
VR32U-31B71250					262,5							
VR32U-31A71240-R					-	193,5						
VR32U-35A71220	160	50	44	162	240	183	172	80,5	25	12,5	150	
VR32U-35B71250					279							
VR32U-35A71240-R					-	208						
VR32U-37A71220	200	50	50	164	240	215	212	89,5	26	13	175	
VR32U-37B71250					305							
VR32U-37A71240-R					-	240						
VR32U-39A71220	236	50	65	208	313	251	252	105,5	35	17,5	215	
VR32U-39B71250					336,5							
VR32U-39A71240-R					-	280						



Dimensions, mm												fig
H1	H2	H3	H4	l	l1	h	d	d1	R	a		
175	-	-	-	44	-	55	7	M6	160	-	1	
215	-	-	80		2							
250	332	95	332		-						5	
180	-	-	-	47	-	58	7	M10	160	-	1	
219	-	-	-		80						2	
250	332	102	332		-						5	
191	-	-	-	50	-	70,5	7	M10	160	-	1	
232	-	-	-		80						2	
250	332	120	332		-						5	
240	-	-	-	52	-	83,5	9	M12	207	-	1	
290	-	-	-		83						2	
350	452	148,5	452		-						5	
231,5	-	-	-	35,5	-	71,5	7	M6	160	38	3	
-	-	-	-		80						4	
250	449	125	449		-						6	
238,5	-	-	-	36	-	78,5	7	M10	160	58	3	
-	-	-	-		80						4	
250	449	150	449		-						6	
259,5	-	-	-	49	-	99,5	7	M10	160	62	3	
-	-	-	-		80						4	
250	449	175	449		-						6	
330,5	-	-	-	52,5	-	120,5	9	M12	207	72	3	
-	-	-	-		83						4	
350	621	215	621		-						6	

#### 4. BASIC DIAGRAM

For one direction 

For two directions 

#### 5. GENERAL KITTING

Delivery set includes:

1. Switch disconnecter series VR32U EKF MAXima;
2. Handle [detachable/fixed];
3. Arc chutes;
4. Fasteners;
5. Product passport.

#### 6. MAINTENANCE AND INSTALLATION FEATURES

Installation and startup of the unit must be performed by qualified personnel. The unit is attached to the mounting plate. Switch disconnecter can be operated in any position if the product operating is ensured. Plane of connection of the external terminals of the nodes is located perpendicularly to the mounting plane. Construction of nodes provides bolted connection of bars or conductors terminated with lugs. Before installing make sure that there is no external damage.

#### 7. TRANSPORTATION AND STORAGE CONDITIONS

7.1 The switch disconnectors can be transported by any kind of closed transport ensuring protection of packaged products from mechanical efforts and atmospheric precipitations.

7.2 The switch disconnecter should be stored in the original package indoors at ambient temperatures ranging from  $-60$  to  $+40$  C °. Relative humidity should be 50% at high temperatures and 90% at low temperatures. The magnetic field at the installation site must not exceed six times the earth's magnetic field.

#### 8. MANUFACTURER GUARANTEE

8.1 The manufacturer guarantees the compliance of switch disconnectors to the requirements of GOST IEC 60947-3-2016 subject to observance by the consumer of service, transportation and storage conditions.

8.2 Warranty period: 3 years from the date of sale of the product.

8.3 Service life: 10 years.

8.4 Guaranteed shelf life: 5 years.

**9. DISPOSAL**

The product that have spent their life and have failed should be disposed of in accordance with the current legal requirements on the territory of the product sale. The product should be disposed of by transferring it to a specialized enterprise for processing secondary raw materials in accordance with the requirements of the legislation of the territory of sale

**10. TEST CERTIFICATE**

Switch disconnectors comply with requirements of GOST IEC 60947-3-2016 and are serviceable.

Manufacture date \_\_\_\_\_

Manufacturer’s technical control stamp

**11. NOTE OF SALE**

Date of sale \_\_\_\_\_

Seller’s signature \_\_\_\_\_

Seller’s stamp

Manufacturer: «Yueqing Xile Electric Appliances Co.», LTD  
Daidong village, Liushi town, Zueqing city, Zhejiang, China

Importer and EKF trademark service representative on the territory  
of the Russian Federation: OOO «Electroresheniya», Otravnaya st.,  
2b bld. 9, 5th floor, 127273, Moscow, Russia. Tel.: +7 (495) 788-88-  
15.

Importer and EKF trademark service representative on the territory  
of the Republic of Kazakhstan: TOO «Energoresheniya Kazakhstan»,  
Kazakhstan, Almaty, Bostandyk district,  
street Turgut Ozal, d. 247, apt 4.



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