



MULTIFUNCTION POWER PROTECTION RELAYS

Upgrade your Electrical Network



MILLIONS OF RELAYS

are protecting Key electrical installation all over the world

Distance Protection

Feeder Protection

Transformer Protection

Motor Protection

Self-powered RMU Protection

Voltage & Frequency Protection

Traction Protection

Numerical Protection Relays

Ashida takes pride in designing, supplying & manufacturing world class multifunction protection & management IEDs. These IEDs are available in different rack sizes depending on actual input output requirement of the client. These relays are tested as per Indian as well as International - IEC standards. The simple & compact construction of ADI1YA series relays provides integrated Protection, Monitoring & Control functions to the users.

Protection Relays Different Versions



Directional Feeder Protection				
Transformer Protection				
Motor Protection				
Distance Protection				

Relays with varied applications:

Relays are designed with fast and selective tripping function which ensures the stability and availability of electrical power system. Wide range of Relay options enables the customer to choose appropriate and economical solution. As per customer's requirements and specifications we can provide different communication protocols like IEC60870-104, IEC60870-103, IEC 61850, MODBUS, DNP3, etc. with different communication ports like RS485, RS422, RJ45, Ethernet Port, USB port, Fiber Optic Port etc.

FEEDER PROTECTION RELAYS

Designed for Transmission Line Protection, Underground Cables & Feeder Protection, Machine Protection and Shunt Capacitor Bank Protection applications.

TRANSFORMER DIFFERENTIAL PROTECTION RELAYS

Designed for Transformer protection-2 winding / 3 Windings, Motor differential protection.

MOTOR PROTECTION RELAYS

Designed for electric motor protection applications.

LINE DISTANCE PROTECTION RELAYS

Designed for Line, Feeder & Machine protection applications.

RING MAIN UNIT PROTECTION RELAYS

Designed for Ring Main Unit protection applications. It is a Self Powered Relay.

Traction Protection relay

ANSI	Functions	Model	A21R	A22R	A23R	A24R	A25R	A26R	A27R
21	Distance Protection		⚡	⚡					
	Delta I Protection			⚡					
21Ext	Zone Extension		⚡						
87	Differential protection				⚡				
32P	Directional Power Protection								
36	Wrong Phase Coupling		⚡						
SOTF	Switch on to Fault		⚡						
VTS PT	Fuse Monitoring		⚡						
21 FL	Fault Location		⚡						
49	Thermal Overload		⚡						
50/51	Instantaneous/Definite Time Phase Over Current Protection		⚡			⚡	⚡		
95	Trip Circuit Supervision		⚡	⚡		⚡	⚡		
79	Auto Reclose		⚡						
27	Under Voltage protection			⚡					⚡
59	Over voltage protection								⚡
50BF	Breaker Failure		⚡	⚡	⚡	⚡	⚡		
B0DC	DC supervision								⚡
	Independent Protection Setting Groups			2	2	2	2	2	2
	Disturbance Recording		⚡	⚡	⚡	⚡	⚡	⚡	⚡
	Event Recording		⚡	⚡	⚡	⚡	⚡	⚡	⚡
	Fault Recording		⚡	⚡	⚡	⚡	⚡	⚡	⚡

Self Powered RMU Protection Relays

ANSI	Functions	Model	Model			
			AM 460 (ver.)	ADR 241S	AM 760 (ver.)	ADR 241S
37	Under Current Protection					
46	Negative Phase Protection					
46BC	Broken Conductor Detection					
49	Thermal Overload Protection					
50	Instantaneous/Definite Time Phase Over Current Protection					
50N	Instantaneous/Definite Time Ground Over Current Protection					
51	Inverse Time Phase Over Current Protection					
51N	Inverse Time Ground Over Current Protection					
68	Inrush Blocking					
79	Auto Reclosing					
86	Lockout (Trip Command)					
CLP	Cold Load Pick Up					
	Disturbance Recording					
	Event Recording					
	Fault Recording					
	Self Supervision					
	3 Mechanical Flags					
	DI/DO		4/4	4/3	4/4	4/5
	Communication Protocols		IEC103/MODBUS			

Model
AM 460 (ver.)
ADR 241S
AM 760 (ver.)
ADR 241S
AM 511 (Hor.)
ADR 241S
AM 521 (DWO.)
ADR 241S

Transformer Differential Protection Relay

ANSI	Functions	Model	Model			
			A21T	Basic	Enhanced	Enhanced(Do)
			Bx	Ex	Ex(Do)	Mx
24	Over Excitation Protection					
27	Under Voltage Protection					
46	Negative Phase Sequence Protection					
49 BC	Broken Conductor Detection					
49	Thermal Overload Protection					
50	Instantaneous/Definite Time Phase Over Current Protection					
50N	Instantaneous/Definite Time Ground Over Current Protection					
50BF	Breaker Failure					
51	Inverse Time Phase Over Current Protection					
51N	Inverse Time Ground Over Current Protection					
59	Over Voltage Protection					
REF-64R	High/Low Impedance Ground Differential Protection					
86	Lockout (Trip Command)					
87T	Two Winding Transformer Phase Differential Protection					
	Three Winding Transformer Phase Differential Protection					
	Cabinet Type Drawout					
	Trip Circuit Supervision					
	Independent Protection Setting Groups		2	2	4	4
	Disturbance Recording		5	10	10	10
	Event Recording					
	Fault Recording		5	10	10	10
	Digital Input		6	12	11/16	16
	Digital Output		6	11	10	10
	Communication Protocols		IEC103 MODBUS IEC61850 /PRP/HSR			

Model
ADR 233B

Feeder Protection
Relay

		Model										ADR 245B			
ANSI	Functions											Basic		Enhanced	
		A22F	ADR 141C	ADR 241A	ADR 241B	Bx	Ex	Ex(Do)	Mx	Enhanced(Do)	Modular				
25	Sync Check														
27	Under Voltage Protection														
32P	Directional Power Protection														
37	Under Current Protection														
46	Negative Phase Sequence Protection														
46BC	Broken Conductor Detection														
47	Negative Phase Sequence Over Voltage Protection														
49	Thermal Overload Protection														
50	Instantaneous/ Definite Time Phase Over Current Protection														
50N	Instantaneous/ Definite Time Ground Over Current Protection														
50BC	Broken Conductor														
50BF	Breaker Failure														
50SEF	Sensitive Ground Over Current Protection														
51	Inverse Time Phase Over Current Protection														
51N	Inverse Time Ground Over Current Protection														
51V	Voltage Dependant Over Current														
55	Power Factor Protection														
59	Over Voltage Protection														
59N	Residual Over Voltage Protection														
64R	High Impedance Restricted Earth Fault Protection														
67P	Directional Phase Over Current Protection														
67N	Directional Ground Over Current Protection														
74	Alarm Output														
79	Auto Reclosing														
81O/U	Frequency Protection														
81R	Rate of Change of Frequency														
86	Lockout (Trip Command)														
CLP	Cold Load Pick Up														
VTS/60	VT Supervision Detection														
CTS	CT Supervision Detection														
Eload	Load Encroachment														
SOTF	Switch On To Fault														
	Cabinet Type Drawout														
	Trip Circuit Supervision														
	Digital Inputs														
	Digital Outputs														
	Independent Protection Setting Groups														
	Disturbance Recording														
	Event Recording														
	Fault Recording														
	Communication Protocols														

Motor Protection
Relays

		Model										ADR 244B			
ANSI	Functions											A21M		ADR 244A	
		DO	Ex	Ex(Do)	Mx	DO	Ex	Ex(Do)	Mx	Enhanced	Enhanced(Do)				
27	Under Voltage Protection														
32P	Directional Power Protection														
32R	Reverse Power Protection														
37	UnderCurrent Protection														
40	Loss of Excitation														
46	Negative Phase Sequence Protection														
46 BC	Broken Conductor Detection														
47	Negative Phase Sequence Over Voltage Protection														
48	Motor Prolong Start Protection														
49	Thermal Overload Protection														
50	Instantaneous/Definite Time Phase Over Current Protection														
50 N	Instantaneous/Definite Time Ground Over Current Protection														
50 BC	Broken Conductor														
50 BF	Breaker Failure														
50 LR	Locked Rotor / Motor Stall Protection														
50 SEF	Sensitive Earth Fault														
51	Inverse Time Phase Over Current Protection														
51 N	Inverse Time Ground Over Current Protection														
51 V	Voltage Dependent Over Current														
55	Power Factor Protection														
59	Over Voltage Protection														
59 N	Residual Over Voltage Protection														
64 R	High Impedance Restricted Earth Fault Protection														
66	Prolonged Start Protection														
68	Out of Step														
74	Alarm Output														
81 O/U	Frequency Protection														
81 R	Rate of Change of Frequency														
86	Lockout (Trip Command)														
VTS/60	VT Supervision Detection														
CTS	CT Supervision Detection														
SOTF	Switch On To Fault														
CLP	Cold Load Pick Up														
	Cabinet Type Drawout														
	Trip Circuit Supervision														
	Digital Inputs														
	Digital Outputs														
	Independent Protection Setting Groups														
	Disturbance Recording														
	Event Recording														
	Fault Recording														
	Communication Protocols														



Distance Protection Relay

ANSI	Functions	Model	ADR 239B
21	Phase Impedance Protection		⚡
21N	Ground Voltage Protection		⚡
27	Under Voltage Protection		⚡
46	Negative Phase Sequence Protection		⚡
46BC	Broken Conductor Detection		⚡
47	Negative Phase Sequence Over Voltage Protection		⚡
50	Instantaneous/Definite Time Phase Over Current Protection		⚡
51	Inverse Time Phase Over Current Protection		⚡
50N	Instantaneous/Definite Time Ground Over Current Protection		⚡
51N	Inverse Time Ground Over Current Protection		⚡
59	Over Voltage Protection		⚡
59N	Residual Over Voltage Protection		⚡
FLC	Fault Locator		⚡
67P	Directional Phase Over Current Protection		⚡
67N	Directional Ground Over Current Protection		⚡
68	Out of Step Protection		⚡
50BF	Breaker Failure		⚡
VTs	VT Supervision Detection		⚡
CTs	CT Supervision Detection		⚡
79	Auto reclosing		⚡
86	Lockout(Trip command)		⚡
	Cabinet Type Drawout		⚡
	Trip Circuit Supervision		⚡
	Digital Inputs		32
	Digital Outputs		32
	Independent Protection Setting Groups		⚡
	Disturbance Recording		10
	Event Recording		⚡
	Fault Recording		10
	Communication Protocols		IEC6070-5-103, MODBUS & IEC 61850, PRP/HSR

Voltage Protection Relay

ANSI	Functions	Model	ADR 242B Drawout
25	Sync Check		⚡
27	Under Voltage Protection		⚡
47	Negative/ Positive Phase Sequence Over Voltage Protection		⚡
59	Over Voltage Protection		⚡
59N	Residual Over Voltage Protection		⚡
74	Alarm Output		⚡
81 O/U	Frequency Protection		⚡
81 R	Rate of Change of Frequency		⚡
86	Lockout (Trip Command)		⚡
VTs/60	VT Supervision Detection		⚡
	Cabinet Type Drawout		⚡
	Trip Circuit Supervision		⚡
	Digital Inputs		8
	Digital Outputs		8
	Independent Protection Setting Group		⚡
	Disturbance Recording		10
	Event Recording		⚡
	Fault Recording		10
	Communication Protocols		IEC6070-5-103, MODBUS & IEC 61850, PRP/HSR





Flag Relay



Auxiliary Relay in CSB Cabinet



Auxiliary Relay in CSC Cabinet

Auxiliary Relays

ASHIDA electro-mechanical type auxiliary relays. Full range of auxiliary relays for applications of control & monitoring, tripping circuit breakers, supervising, signaling and interlocking. Simple, compact and robust design. All relays conform to IS:3231 requirements.

	AVAJH13	AVAJS13	AVAJH23	AVAJS23	AVAJC11	AVA1X	AVA2X	AVA3X	AVA4X	AVA21D	AVA21A	ATSR31A	AFLGR
Electro - Mechanical Relays													
Type of Relay													
Non Draw Out Type	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
Application													
High Speed Master Trip Relay	⚡	⚡	⚡	⚡									
Supervision Relay (AC, DC & Trip Coil)						⚡	⚡	⚡	⚡			⚡	
DC Failure Relay										⚡			
AC Failure Relay											⚡		
Auxiliary Relay						⚡	⚡	⚡	⚡				
Contact multiplication Relay					⚡								
Type of Contact Reset													
Self Reset Type		⚡		⚡		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
Hand Reset Type	⚡		⚡			⚡	⚡	⚡	⚡				
Hand Reset Type + Self Reset Type				⚡		⚡	⚡	⚡	⚡				
Electrical Reset					⚡								
Type of Flag													
Hand Reset Flag	⚡	⚡	⚡	⚡		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
Without Flag						⚡	⚡	⚡	⚡	⚡	⚡		
Reverse Flag						⚡	⚡	⚡	⚡	⚡	⚡		
Operational Flag					⚡								
No of Element													
Single Element	⚡	⚡				⚡							
Two Element			⚡	⚡	⚡		⚡			⚡	⚡	⚡	
Three Element								⚡					
Four Element									⚡				
No. of Contact													
2 Contacts													
3 Contacts												⚡	
4 Contacts			⚡	⚡		⚡	⚡	⚡	⚡	⚡	⚡		
6 Contacts													
7 Contact	⚡	⚡											
8 Contact					⚡								
Cabinet Size													
CSB (92mm x 92mm)	⚡	⚡	⚡	⚡	⚡	⚡	⚡			⚡	⚡	⚡	
CSC - V (186 X 92mm)					⚡								
CSC - H (92 X 186 mm)								⚡	⚡				

⚡ Available ⚡ Each Element



ASHIDA Draw Out Electro-Mechanical Relays- OJAS Series

Ashida takes pride in designing, supplying & manufacturing world class multifunction protection & management IEDs. These IEDs are available in different rack sizes depending on actual input output requirement of the client. These relays are tested as per Indian as well as International - IEC standards. The simple & compact construction of ADI1YA series relays provides integrated Protection, Monitoring & Control functions to the users.



ASHIDA RELAY TEST BLOCK

ART-B



ASHIDA RELAY TEST PLUG

ART-P

provides facilities for monitoring & secondary injection testing of any power system protection scheme.

Available in Horizontal & vertical type.

The models are available in Case Size 2 & Case Size 4 with panel cut out size 159mm (H) x 48mm (W) and 159mm (H) x 100mm (W) respectively.

Electro - Mechanical Relays

ADE-T
ADE-S
ADE-A
ADE-C

Type of Relay

Draw Out Type

⚡ ⚡ ⚡ ⚡

Application

High Speed Master Trip Relay

⚡

Supervision Relay (AC, DC & Trip Coil)

⚡

Auxiliary Relay

⚡

Contact multiplication Relay

⚡

Type of Contact Reset

Self Reset Type

⚡

Hand Reset Type

⚡

Electrical Reset

⚡

Hand Reset Type + Electrical Reset Type

⚡

Type of Flag

Standard Flag

⚡

Following Flag

⚡

Reverse Flag

⚡

No Flag

⚡

No of Element

Single Element

⚡

Two Element

⚡

No. of Contact

2 Contacts

⚡

3 Contacts

⚡

4 Contacts

⚡

6 Contacts

⚡

8 Contact

⚡

10 Contacts (Single Element)

⚡

20 Contacts (Two Element in series)

⚡

Case Size

Case 2

⚡

Case 4

⚡

⚡ Available

