



Industry Notification

APPLICATION NOTE

Product Management – Coal Mining Industry Notification | MAG-314 December 2021

IPD to IPE Protection System Differences

PROTECTION SYSTEM FEATURE DIFFERENCES

IPD RELAY FEATURES	IPE RELAY FEATURES
Certification: IECEx ITA 07.0018X	Certification: IECEx ITA 12.0032X
Earth Leakage: AS2081-2002	Earth Leakage: AS2081-2011
Earth Continuity (including remote start mode) : AS2081-2002	Earth Continuity (including remote start mode) : AS2081-2011
Earth Fault Lockout – LV & HV Test: AS2081-2002	Earth Fault Lockout – LV & HV Test: AS2081-2011
Short circuit protection: Standard and Transient addition	Short circuit protection: Standard and Long Time SC when in MOL mode only
Contactors Failure protection: AS2081-2002	Contactors Failure protection: AS2081-2011
Current balance protection	Current balance protection
Overload / Overcurrent protection (IEC 60255-151), Very Inverse Only	Overload /Overcurrent protection (IEC 60255-151), Very Inverse and Extremely Inverse
Motor thermal overload protection (IEC 60255-8)	Motor thermal overload protection (IEC 60255-8)
Under current protection	Under current protection
Under voltage protection	Under voltage protection
Back EMF Setting	Back EMF Setting
Hard wired Fan Interlocking	PIP Controlled Fan Interlocking
Settings via RDM	Settings via PIP HMI interface
Limited Diagnostics through RDM	All internal diagnostics available over Ethernet
120 Event Logs Stored	50 Event Logs Stored
31 Event Log Descriptions	140 Event Log Descriptions
IPD Settings lost when replaced	IPE Memory Dongle stores outlet settings
Remote Termination Unit: RTU-D3	Remote Termination Unit: RTX
4x RTD inputs into RTU-D3	5x RTD inputs into RTX
IPD/RTU-D3 Settings lost when replaced	RTX Memory Dongle stores IPE + RTX settings
Read only communications	PIP HMI can be accessed remotely
Hardwired Reset / Start / Stop	Reset / Start / Stop from PIP or Remotely over Ethernet Protocols
2x Phase Currents Monitored	3x Phase Currents Monitored

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ELECTRICAL COMPONENT REQUIREMENT DIFFERENCES

IPD SYSTEM FEATURES	IPE SYSTEM FEATURES
IPD RELAY	IPE RELAY
RELAY BASE	RELAY BASE
-	Protection Interface Platform (1 PIP for up to 16 outlets)
RDM D DISPLAY (1x per outlet)	PIPS – Panel Mount Touch Screen (Optional) (1 PIPS per PIP)
Start, Stop, Reset Wiring (1x per outlet)	-
IPSI DNET (1x per outlet)	Ethernet Connection
DNET PROTOCOL CONVERTER (1x for up to 9 outlets)	-
DNET POWERSUPPLY (1x per protocol converter)	-
IKD KEYPAD (1x per outlet)	-
IKD KEYPAD INTERFACE (1x per outlet)	-
REMOTE TERMINATION UNIT RTU D3	REMOTE TERMINATION UNIT RTX
CABLE CONNECTION MODULE (415V or 1.1KV or 3.3KV CCMD) (1x per outlet)	Built into Each Protection Relay
1x EL TOROID (per outlet)	1x EL TOROID (per outlet)
2x Phase CT's (per outlet)	3x Phase CT's (per outlet)
-	IPE Dongle (per outlet)
-	RTX Dongle (per outlet)
-	PIP Dongle (per PIP)
-	PIP System IO Block (per PIP)
PLC IO Block (per outlet as required)	Outlet IO Block (per outlet)

FIND OUT MORE

For more information on this Notification, contact Ampcontrol Customer Service on +61 1300 267 373 or customerservice@ampcontrolgroup.com

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