PERTRONIC INDUSTRIES PTY LTD

DATASHEET
Extinguishing Agent Release Controller
AGENTRELEASEC

Overview

The **Pertronic Extinguishing Agent Release Controller (AGENTRELEASEC)** is designed for installation in a fire indicator panel (FIP), which may be a Pertronic F220© or a third-party panel.
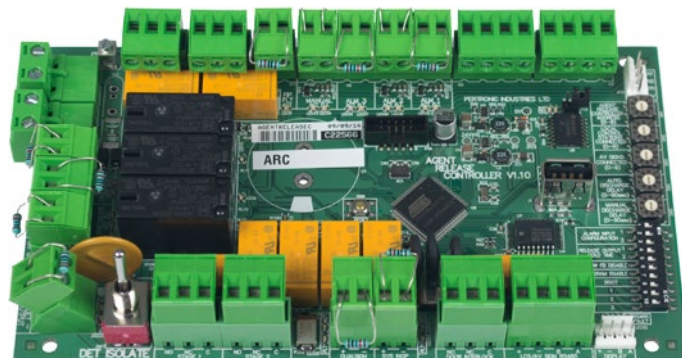
Multiple Extinguishing Agent Release Controllers may be fitted in a single panel. Each controller requires at least one **Pertronic Agent Control Station (ACS)**, which is mounted adjacent to the controller.

The controller provides automatic and manual operating modes.

In automatic mode, two independent alarm signals from the FIP are required to activate the agent release process ("double-knock"). One alarm signal initiates **Stage 1** activation. A second alarm signal starts **Stage 2** activation: The agent release process begins when both alarm inputs are active.

Manual Activation is initiated by manually activating a release device (Manual call point with break glass and lift flap) on the FIP or any connected control station.

Automatic Stage 2 Activation, or Manual Activation, starts the agent release delay timer. **Time to Discharge** indicators on connected control stations and remote audio-visual signs show the time in seconds until the controller triggers

Extinguishing Agent Release Controller

the release of the extinguishing agent. The agent release delay timer may be paused by activation of a lock-off valve, or by an interlock activation (such as a connected door or vent switch). Extinguishing agent release may be aborted by pressing the **Auto Release Disabled** button on any connected control station. Pressing the **Auto Release Disabled** button at any time disables automatic operation of the controller.

Features

» Compatible with Pertronic F220© fire panel
» Automatic or manual agent release process
» Automatic delay is configurable, from 5 seconds to 90 seconds
» Manual delay configurable, independent of automatic delay, from 5 seconds to 90 seconds
» Communicates with up to ten control stations (ACS or LCS) including the primary ACS
» RS485 bus for communication with control stations
» Automatic release can be aborted from any control station
» Multiple controllers can be manually triggered from a single device
» Agent release output hold time configurable: 20 seconds, 30 seconds, 60 seconds, or 5 minutes
» Low pressure fault input configurable for normally-open or normally-closed activation
» Pressure switch feedback confirms release (optional)

» On-board **Detonator Isolate** switch
» Configurable single-knock option allows the agent release process ("Stage 2 Activation") to be initiated by a single alarm signal
» Supervised Outputs:
    » Agent/ Local Control Stations
    » Detonation Output
    » Dual Stage Sign Output (Stage 1, Stage2)
    » System Inoperative Sign Output
» Outputs:
    » Stage 1 Activation
    » Stage 2 Activation
    » Agent Released
    » Agent Release System Fault
» Meets the requirements of Australian Standard AS ISO 14520.1:2009
» AS 4214:2018 approval pending

Specification

Operating Voltage	20 V dc – 30 V dc	
Current Consumption	30 mA	Quiescent
	95 mA	Alarm Stage 1
	120 mA	Alarm Stage 2
Inputs		
Alarm 1, Alarm 2, Manual Activation, FIP Flt, Low Pressure Flt, Lock Off Valve, Pressure Switch	Supervised via 10 kΩ EOL for Open and Short Circuits	
Outputs		
Detonation	24 Vdc (nominal), 1.5 A	Supervised
Dual Sign, System Inoperative Sign	24 Vdc (nominal), 1.1 A	Supervised
Activation Stage 1, Activation Stage 2, Agent Released, Agent Release System Fault, Door Interlock	2 A @ 30 Vdc (resistive)	Relay Contacts, Form C, Non-Supervised
ACS / LCS Control Station Bus Power Data	24 Vdc (nominal), 1.85 A RS485 Data A + B	
Dimensions	170 x 98 x 30	W x H x D mm
Mounting Holes	Four x 4 mm diameter	Centred at 152 x 89 mm
Operating Temperature	-5 °C to 45 °C	
Humidity	10 – 95 % RH, non-condensing	

Extinguishing Agent Release System

Detectors

Extinguishing Agent

Extinguishing Agent Release Panel

Agent / Local Control Stations

Audio Visual Signs

Ordering Information

Product Code	Description	Product Code	Description
AGENTRELEASEC	Agent Release Controller	ACS-FM	Agent Control Station, Flush Mount
F100A-A10U-ARC	F100A Fire Suppression Panel, 10U, 4A PSU	ACS-SM	Agent Control Station, Surface Mt.
F220-A10U/5A-ARC	F220 Fire Suppression Pnl, 10U, 2 Loop, 5A PSU	LCS-M	Local Control Station, Flush Mount
F220-A16U/5A-ARC	F220 Fire Suppression Pnl, 16U, 2 Loop, 5A PSU	LCS-SM	Local Control Station: Surface Mt.
F220-A28US/5A-ARC	F220 Fire Suppression Panel, 28U Slim, 2 Loop, 5A PSU	AVS-B	Audio Visual Sign (excl. fascia)
		AVS-C	AV Sign, c/w Timer (excl. fascia)

This information must not be treated as partial or complete instructions for the design, construction, installation, commissioning, or maintenance of fire detection, fire alarm, or building evacuation systems. Fire and evacuation systems must be designed and installed by properly qualified persons, in accordance with all regulatory requirements. Unless explicitly stated otherwise, typical specifications and nominal dimensions are provided. Actual product performance and dimensions may vary.

All information in this document is subject to change. Please consult Pertronic Industries or visit our web site for up to date information.

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