

# PERTRONIC INDUSTRIES LTD

## DATASHEET

### Extinguishing Agent Release Controller



## Overview

The Pertronic Extinguishing Agent Release Controller (AGENTRELEASEC) is designed for installation in a fire panel, which may be a Pertronic F220, F100A or F16e, or a third-party panel.

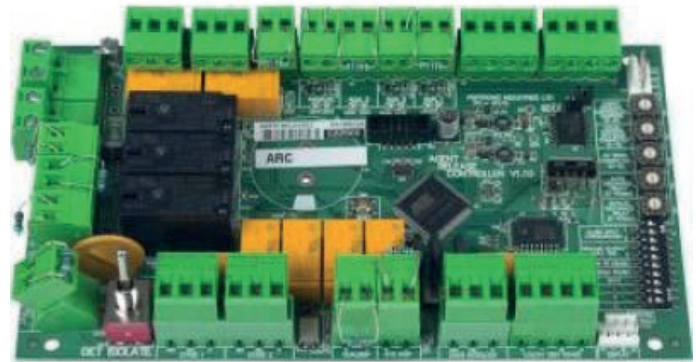
Multiple extinguishing agent release controllers may be fitted in a single panel. Each controller requires at least one Pertronic Agent Control Station (ACS), which is mounted adjacent to the controller.

The controller provides automatic and manual operating modes.

In automatic mode, two independent alarm signals from the fire panel 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 fire panel 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 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.



*Pertronic Extinguishing Agent Release Controller*

## Features

- » Compatible with Pertronic F220, F120A, F100A, and F16e fire panels
- » 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 AS ISO 14520.1:2009

## Specifications

<b>Operating Voltage</b>		20 to 30 Vdc
<b>Current</b>	<b>Quiescent</b>	30 mA @ 24 Vdc
	<b>Alarm - Stage 1</b>	95 mA
	<b>Alarm - Stage 2</b>	120 mA
<b>Inputs</b>	<b>Alarm 1 and Alarm 2, Manual Activation, Low Pressure Fault, Lock-Off Valve, Pressure Switch, FIP Fault</b>	Supervised via 10 kΩ EOL for Open and Short Circuits
<b>Outputs</b>	<b>Detonation</b>	1.5 A @ 24 Vdc (nominal), supervised
	<b>Dual Sign, System Inoperative Sign</b>	1.1 A @ 24 Vdc (nominal), supervised
	<b>Agent Released, Agent Release System Fault, Stage 1 and Stage 2 Activation, Door Interlock</b>	2 A @ 30 Vdc (resistive), relay contacts, Form C, non-supervised
<b>ACS/LCS Control Station Bus</b>	<b>Power</b>	1.85 A @ 24 Vdc (nominal)
	<b>Data</b>	RS485 data A + B
<b>PCB Dimensions (H x W x D mm)</b>		98 x 170 x 38
<b>Mounting Hole Dimensions</b>		Four x 4 mm diameter, centred at 152 x 89 mm
<b>Operating Temperature</b>		-5 to 45 °C
<b>Operating Humidity</b>		10 to 95% RH (non-condensing)

## Extinguishing Agent Release Panel Diagram



## Ordering Information & Notes

Product Code	Description
AGENTRELEASEC	Agent Release Controller Printboard Assembly V110

The information in this document 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, this document provides typical specifications and nominal dimensions. Actual product performance and dimensions may vary.

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