



AGA CERTIFIED PRODUCT



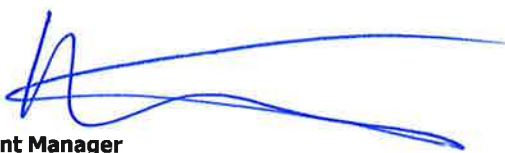
Certificate Holder: **ESA S.p.A.**
ABN/ACN No. (if applicable): **N/A**
Manufacturer: **ESA S.p.A.**
Agent (if applicable): **AUSTRALIAN BURNER MANUFACTURERS PTY LTD**
Type of Component: **AUTOMATIC BURNER CONTROL SYSTEM**
Model No. & Description: **ESA ESTRO**
(Refer www.aga.asn.au for more details)
ESTRO-(A2,B2,C2,Q2) (A,S)-(,2M,3M,4M)-(XX)-(XX)-(C,D)(N,Y,K,R,S)-(1,2)-(/,F)-(**,2M,3M,4M) (D,/)-(C,D,P,R)(/,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(*)(/,H)(/,S)(0-2)-(*) (4,9,1,3)(E,1,2)-/(/,T,C,A,2,3,4)(1,2,4,/)(/,H,L)(/,T)(/,R,L)**
Key: * = 0 - 9 ** = 0 - 99 XX = 0 - 25
Relevant Standard(s): **EN 298-2003
AS 4625-2008**

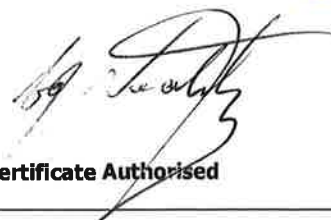
This is to certify that the particular **COMPONENT** specifically described herein and supplied to The Australian Gas Association (hereafter called the AGA) by the Certificate Holder named above has been subject to "type-testing" and assessed by the AGA to comply with the requirements of the AGA's Product Certification Scheme for Type Tested Gas Products.

This Certificate is issued on the express conditions that:

- (i) The Certificate Holder undertakes to comply with the Rules Governing The AGA's Product Certification Scheme (hereafter called the Rules Governing);
- (ii) This Certificate remains the property of the AGA; and
- (iii) The AGA reserves the right to cancel this Certificate in accordance with the Rules Governing, and in such an event the Certificate Holder undertakes to surrender the Certificate to the AGA upon request.




Client Manager


Certificate Authorised

Certificate first issued: **11 May 2007**

Certificate No: **7155**

This copy valid from: **23 June 2016**

Refer specification Issue: **06**

Directory Certificate Entry

Components

Electronic Flame Safeguards Including Igniters

ESA S.p.A.

(Via E Fermi 40, 1-24035 CURNO (BG), ITALY Ph: +39 035 622 7411)

Relevant Standard/s: AS 4625 | 2008 | Electronic flame safeguards and flame detectors | 31/12/2008
 EN 298 | 2003 | Automatic gas burner control systems for gas burners and gas burning appliances with or without fans | 3/10/2003

Agent: Australian Burner Manufacturers Pty Limited
 (2/2 Access Way, CARRUM DOWNS,
 3201 VIC AUSTRALIA Ph: 03 9770 8545)

ESA ESTRO

7155 5.07

Automatic Burner Control

Intermittent pilot

ESTRO-(B2)(A,S)-(**,2M,3M,4M)-(0-5)-(xx)-(C)(N)-(1,2)-(-)(**,2M,3M,4M)(D,-)
 (C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-
 (*) (4,9,1,3)(E,1,2)/(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Interrupted pilot

ESTRO-(B2)(A,S)-(**,2M,3M,4M)-(0-5)-(2-10)-(D)(N)-(1,2)-(-)(**,2M,3M,4M)(D,-)
 (C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-(*) (4,9,1,3)(E,1,2)-
 /(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Direct Spark Ignition

ESTRO-(A2,C2,Q2)(A,S)-(**,2M,3M,4M)-(0-5)-(xx)-(C,D)(N)-(1,2)-(-)
 (**,2M,3M,4M)(D,-)(C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-
 (*) (4,9,1,3)(E,1,2)/(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Intermittent pilot

ESTRO-(B2)(A,S)-(**,2M,3M,4M)-(0-5)-(xx)-(C)(Y,R)-(1,2)-(-)(**,2M,3M,4M)(D,-)
 (C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-(*) (4,9,1,3)(E,1,2)-
 /(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Interrupted pilot

ESTRO-(B2)(A,S)-(**,2M,3M,4M)-(0-5)-(2-10)-(D)(Y,R)-(1,2)-(-)(**,2M,3M,4M)(D,-)
 (C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-(*) (4,9,1,3)(E,1,2)-
 /(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Direct Spark Ignition

ESTRO-(A2,C2,Q2)(A,S)-(**,2M,3M,4M)-(0-5)-(xx)-(C,D)(Y,R)-(1,2)-(-)
 (**,2M,3M,4M)(D,-)(C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-
 (*) (4,9,1,3)(E,1,2)/(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Intermittent pilot

ESTRO-(B2)(A,S)-(**,2M,3M,4M)-[3](0-25)-(xx)-(C)(N)-(1,2)-(-)(**,2M,3M,4M)(D,-)
 (C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-(*) (4,9,1,3)(E,1,2)-
 /(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Interrupted pilot

ESTRO-(B2)(A,S)-(**,2M,3M,4M)-(0-5)-(2-10)-(D)(N)-(1,2)-(-)(**,2M,3M,4M)(D,-)
 (C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-(*) (4,9,1,3)(E,1,2)-
 /(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Direct Spark Ignition

ESTRO-(A2,C2,Q2)(A,S)-(**,2M,3M,4M)-(0-15)-(xx)-(C,D)(N)-(1,2)-(-)
 (**,2M,3M,4M)(D,-)(C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-
 (*) (4,9,1,3)(E,1,2)/(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Intermittent pilot

ESTRO-(B2)(A,S)-(**,2M,3M,4M)-[3](0-25)-(xx)-(C)(N,Y,K,R,S)-(1,2)-(-)
 (**,2M,3M,4M)(D,-)(C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-
 (*) (4,9,1,3)(E,1,2)/(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Interrupted pilot

ESTRO-(B2)(A,S)-(**,2M,3M,4M)-(0-5)-(2-10)-(D)(N,Y,K,R,S)-(1,2)-(-)
 (**,2M,3M,4M)(D,-)(C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-
 (*) (4,9,1,3)(E,1,2)/(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Direct Spark Ignition

ESTRO-(A2,C2,Q2)(A,S)-(**,2M,3M,4M)-(0-15)-(xx)-(C,D)(N,Y,K,R,S)-(1,2)-(-)
 (**,2M,3M,4M)(D,-)(C,D,P,R)/(,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-(0)/(,H)/(,S)(0-2)-
 (*) (4,9,1,3)(E,1,2)/(,T,C,A,2,3,4)(1,2,4)/(,H,L)/(,T)/(,R,L)

Class
 Note

2A

2Ca

2B

2Cb

For use with ionisation flame rod and ESA UV-2 Ultraviolet Flame Sensor.

Model Code Breakdown

ESTRO-(A2,B2,C2,Q2)(A,S)-(**,2M,3M,4M)-(xx)-(xx)-(C,D)-(N,Y,K,R,S)-(1,2)-(/,F)-
(**,2M,3M,4M)(D,/)-(C,D,P,R)(/,H,B,S,U,T,M,A)(F,B)(B,R,S,U)-*(/)(/)(/)(S)(0-2)-
(*)(4,9,1,3)(E,1,2)-//(/,T,C,A,2,3,4)(1,2,4,/)(/,H,L)(/)(/)(/)(R,L,)

(A2,B2,C2,Q2) = Model Type

(A,S) = (A) Automatic Ignition or (S) Standby on startup

(**,2M,3M,4M) = Prepurge

(xx) = Flame Establishment period

(xx) = Flame Proving Time (A2)/Main Burner Stabilisation Time (B2)

(C,D) = (C) Intermittent Pilot or (D) Interrupted Pilot

(N,Y,K,R,S) = Behaviour on flame failure (N) Lockout, (Y) Full Recycle or (K)

Immediate reignition (R) 1 x Recycle or (s) 1 x Immediate reignition

(1,2) = Supply Voltage (1) 115 or (2) 230

(/) = [4](/,F) Post purge Flex

(**,2M,3M,4M) = Post Purge time

(D,/) = Force restart every 24h (D) enabled or (/) Disabled

(C,D,P,R) = Air Control Method

(/,H,B,S,U,T,M,A) = [5] Digital Input

(F,B) = Lockout Output light on (F) Fault or (B) Fault or Stop

(B,R,S,U) = Front Panel Button Option

(*) = Automatic Reset

(/,H) = High Temperature function (/) disabled (H) active

(/,S) = Safety time (/) fixed or (S) shortened

(0-2) = Flame Failure Response Time

(*) = Communication Time Out

(4,9,1,3) = Communication Speed

(E,1,2) = Communication Protocol

//

(/,T,C,A,2,3,4) = Special Version (/) Standard

(1,2,4,/) = EXP-2 Supply voltage

(/,H,L) = Air Pressure Switch Fail (/) N/A, (H) Wait or (L) Lockout

(/,T) = Thermostat (/) Inactive or (T) active

(/,R,L) = Air Damper (/) Inactive (R) remote or (L) Local

Note: Flame Failure Response Time must not exceed 2s in all controls.

Thursday, 23 June 2016