

National Standards Commission

12 Lyonpark Road, North Ryde NSW

Supplementary Certificate of Approval

No S306

Issued under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the

Gilbarco Model MACRIP Card-operated Driveway Flowmeter Control Console

submitted by Marconi Commerce Systems Australia Limited
formerly Gilbarco Aust. Ltd
12-38 Talavera Road
North Ryde NSW 2113.

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

CONDITIONS OF APPROVAL

This approval became subject to review on 1 January 1999.

This approval will expire in respect of new instruments on 1 January 2002.

Instruments purporting to comply with this approval shall be marked NSC No S306 and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S306 in addition to the approval number of the instrument.

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the Commission and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with the Commission's Document NSC P 106.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate of Approval No S1/0/A.

DESCRIPTIVE ADVICE

Pattern: provisionally approved 3 December 1993
approved 11 February 1994

- A Gilbarco model MACRIP card-operated control system which may be used in a Commission-approved driveway flowmetering system incorporating Gilbarco T087 and/or T088 MPP series driveway flowmeters.

Variants: approved 11 February 1994

1. For use with a Gilbarco TMS15 (or TCR 15) control console.

Technical Schedule No S306 describes the pattern and variant 1.

Variants: approved 6 March 1995

2. For use with Gilbarco T077 and/or T078 and/or T079 MPP series driveway flowmeters.

Technical Schedule No S306 Variation No 1 describes the variant 2.

Variants: provisionally approved 3 November 1995
approved 15 April 1996

3. For use with a Postec FCC4 controller and a Breeze point of sale system.

Technical Schedule No S306 Variation No 2 describes variant 3.

Variants: approved 7 October 1996

4. The MACRIP unit in a separate pedestal-type housing.

Technical Schedule No S306 Variation No 3 describes variant 4.

Variant: approved 13 December 1996

5. For use with Production Engineering 7000 series driveway flowmeters.

Technical Schedule No S306 Variation No 4 describes variant 5.

Variant: approved 2 December 1998

6. The MACRIP DCA card-operated control system

Technical Schedule No S306 Variation No 5 describes variant 6.

Variant: approved 11 December 2000

7. For use with Gilbarco Enterprise series fuel dispensers.

Technical Schedule No S306 Variation No 6 describes variant 7.

FILING ADVICE

Supplementary Certificate of Approval No S306 dated 31 March 1999 is superseded by this Certificate and may be destroyed.

The documentation for this approval now comprises:

- Supplementary Certificate of Approval No S306 dated 28 February 2001
- Technical Schedule No S306 dated 3 June 1994 (incl. Test Procedure)
- Technical Schedule No S306 Variation No 1 dated 17 April 1995
- Technical Schedule No S306 Variation No 2 dated 10 May 1996
- Technical Schedule No S306 Variation No 3 dated 20 December 1996
- Technical Schedule No S306 Variation No 4 dated 10 March 1997
- Technical Schedule No S306 Variation No 5 dated 31 March 1999
- Technical Schedule No S306 Variation No 6 dated 28 February 2001
- Notification of Change No 1 dated 24 November 1995
- Notification of Change No 2 dated 13 November 1998
- Figures 1 to 5 dated 3 June 1994
- Figure 6 dated 17 April 1995
- Figures 7 and 8 dated 10 May 1996
- Figure 9 dated 20 December 1996
- Figure 10 dated 10 March 1997
- Figures 11 to 14 dated 31 March 1999

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.





National Standards Commission

TECHNICAL SCHEDULE No S306

Pattern: Gilbarco Model MACRIP Card-operated Driveway Flowmeter Control System.

Submitter: Gilbarco Aust. Ltd
12-38 Talavera Road
North Ryde NSW 2113.

1. Description of Pattern

A Gilbarco model MACRIP card-operated control system which may be used in a Commission-approved flowmetering system incorporating Gilbarco T087 and/or T088 MPP series driveway flowmeters.

The MACRIP system allows account and EFT (electronic funds transfer) transactions to be made from the driveway flowmeter using authorised cards. The authorised cards may either be controlled distribution cards issued to selected users or financial institution cards available to the public.

1.1 The System

The MACRIP system (Figure 1) comprises:

- A Gilbarco model MACRIP 'Customer Interface Module' (CIM) and receipt printer (Figure 2);
- A Gilbarco model T084V controller (Figure 3);
- A Hypercom model NAC-6A controller (Figure 4);
- A Gilbarco T24 driveway flowmeter control console and 'Data Distribution Module' (Figure 5), also described in NSC Approval S246; and
- A Gilbarco communication interconnection box.

The system is for use with Gilbarco T087 and/or T088 series MPP driveway flowmeters as approved in NSC Approval 5/6A/84A. The driveway flowmeters may be authorised either by the MACRIP card-operated terminal or by the T24 console.

1.2 MACRIP Customer Interface Module (Figure 2)

The MACRIP module may be fitted to one or both sides of the driveway flowmeter. It has control only over that side to which it is fitted.

The MACRIP module has the following features:

- An alphanumeric display used to generate prompts to guide the user through data entry functions.
- A keypad with numeric/alpha keys, account selection and specific function keys.
- A swipe card-reader.
- A receipt printer.

NOTE:

- (i) All transaction data is recorded on the purchaser's receipt and the driveway flowmeter will remain 'locked' (unable to be authorised) for a period of time so that the receipt details can be checked against the indicator.
- (ii) The order of the operating procedure may vary with the financial institution requirements.
- (iii) The authorised card(s) may contain restrictions and special conditions, e.g. limits on type and/or amount of fuel that a user may obtain, which may vary with the type of card and account transaction utilised.

1.3 T084V Controller (Figure 3)

The T084V general purpose controller controls the system including the MACRIP module, printers and the driveway flowmeter control console.

The controller has an internal journal printer which records all transactions made with the MACRIP system and may be interfaced with up to the maximum Commission-approved driveway flowmeters for which the console is approved.

1.4 NAC-6A Controller (Figure 4)

The NAC-6A controller is necessary for the system to operate; amongst other functions it allows communication with financial institutions for EFT (electronic funds transfer) transactions.

1.5 T24 Control Console (Figure 5)

The T24 console controls the driveway flowmeters by receiving remote authorisation from the MACRIP system, and without operator intervention at the T24 console.

1.6 Data Distribution Module (Figure 5)

A Data Distribution Module (DDM) is necessary for the T24 console to operate. An additional DDM is required if the system includes more than 16 MACRIP modules (Figure 1).

1.7 Communication Interconnection Box

The communication interconnection box allows the operator to disconnect any of the driveway flowmeters from the controller. The time of connection or disconnection is recorded on the controller's journal printer roll.

1.8 Verification/Certification Provision

Provision is made for a verification/certification mark to be applied on the driveway flowmeter(s) fitted with the MACRIP card acceptor, on the T084V and NAC-6A controllers, and on the T24 control console.

1.9 Markings

The driveway flowmeter(s) fitted with the MACRIP card acceptor, and the T084V and NAC-6A controllers, are each marked with the following data together in one location:

Manufacturer's name or mark
Serial number
Model name or number
NSC approval number

NSC No S306

2. Description of Variant 1

The MACRIP card-operated control system used with the Gilbarco model TMS15 driveway flowmeter control console. This console, which may also be known as the model TCR 15, is also described in NSC Approval S233. It does not require a Data Distribution Module in order to operate, unless the system includes more than 16 MACRIP modules.

TEST PROCEDURE

Instruments should be tested in accordance with any tests included in the approval documentation for the driveway flowmeter/s to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Inspector's Handbook.

The maximum permissible errors applicable are those applicable to the flowmetering system to which the pattern is connected, as stated in the approval documentation for the system.

To check the operation of the MACRIP system a special Weights and Measures test card may be used. This card allows a delivery to be authorised and recorded through the MACRIP without interfering with its financial aspects.

MACRIP Module Test

- (a) Obtain with the manager's assistance the Weights and Measures test card.
- (b) Swipe the Weights and Measures test card through the customer interface module card reader.
- (c) Answer the prompts on the customer interface module's display to authorise a transaction from a driveway flowmeter. Any personal identification number (PIN) or account type may be used. Select YES when prompted for a receipt for the transition.
- (d) Make a delivery from the selected driveway flowmeter. Ensure that the nozzle is out of its receptacle for at least 5 seconds during this step.
- (e) Complete the transactions and compare the printed values on the receipt with those displayed on the driveway flowmeter, the control console and the printed record of transaction on the controller journal printer roll.
- (f) Repeat steps (a) to (e) for a number of driveway flowmeters.

NOTE:

In the event of a power failure occurring while a delivery is in progress a receipt is printed automatically and there may be a discrepancy between the values printed on the receipt and the values displayed on the driveway flowmeter. In this case the following is printed on the receipt:

POWER FAILURE
RECEIPT IS CORRECT
RECORD OF TRANSACTION

Note to Trade Measurement Authorities

In the event that the EFT facility is temporarily out of service through the action of a financial institution to which it is connected, the driveway flowmeter(s) may be verified in isolation from the EFT facility.



National Standards Commission

TECHNICAL SCHEDULE No S306

VARIATION No 1

Pattern: Gilbarco Model MACRIP Card-operated Driveway Flowmeter Control System.

Submittor: Gilbarco Aust. Ltd
12-38 Talavera Road
North Ryde NSW 2113.

1. Description of Variant 2

A Gilbarco model MACRIP card-operated control system which may be used in a Commission-approved flowmetering system incorporating Gilbarco T077 and/or T078 and/or T079 MPP series driveway flowmeters.

Figure 6 shows a typical installation.



National Standards Commission

TECHNICAL SCHEDULE No S306

VARIATION No 2

Pattern: Gilbarco Model MACRIP Card-operated Driveway Flowmeter Control System.

Submitter: Gilbarco Aust. Ltd
12-38 Talavera Road
North Ryde NSW 2113.

1. Description of Variant 3

A Gilbarco model MACRIP card-operated control system which may be used in a Commission-approved flowmetering system incorporating a Postec model FCC4 controller and a Commission-approved point of sale system using Breeze point of sale software.

Figure 7 shows a typical installation.

1.1 Controller

The Postec model FCC4 controller (Figure 8) controls the various functions of the driveway flowmeters. The controller is also described in the documentation of NSC approval No S244A.

1.2 Point of Sale System

The point of sale system may be any IBM-compatible personal computer using Breeze version SRV 4.**, or FCDV.COM 3.**, or POSTEC.COM 5.** point of sale software (where ** represents any suffix).

National Standards Commission

TECHNICAL SCHEDULE No S306 VARIATION No 3

Pattern: Gilbarco Model MACRIP Card-operated Driveway Flowmeter Control System.

Submittor: Gilbarco Aust. Ltd
12-38 Talavera Road
North Ryde NSW 2113.

1. Description of Variant 4

The Gilbarco MACRIP unit mounted in either one or both sides of a pedestal-type housing which is located adjacent to the driveway flowmeter to which it is connected (Figure 9).

National Standards Commission

TECHNICAL SCHEDULE No S306 VARIATION No 4

Pattern: Gilbarco Model MACRIP Card-operated Driveway Flowmeter Control System.

Submittor: Gilbarco Aust. Ltd
12-38 Talavera Road
North Ryde NSW 2113.

1. Description of Variant 5

A Gilbarco model MACRIP card-operated control system which may be used in a Commission-approved driveway flowmetering system incorporating Production Engineering 7000 series driveway flowmeters.

Figure 10 shows a typical integral installation.

TECHNICAL SCHEDULE No S306
VARIATION No 5

Pattern: Gilbarco Model MACRIP Card-operated Driveway Flowmeter Control System.

Submittor: Gilbarco Aust. Ltd
12-38 Talavera Road
North Ryde NSW 2113.

1. Description of Variant 6

The Gilbarco model MACRIP card-operated control system housed in a stand alone cabinet now known as a DCA (Driveway Card Acceptor). The DCA is approved to control up to 32 driveway flowmeters (fuel dispensers for motor vehicles) in unattended service mode.

The model MACRIP DCA in either of the housings shown in Figures 11 and 12, and with the model T084V controller (Figure 3) and the model NAC-6A controller (Figure 4) installed either within the MACRIP DCA housing or located remotely (Figures 13 and 14).

TECHNICAL SCHEDULE No S306

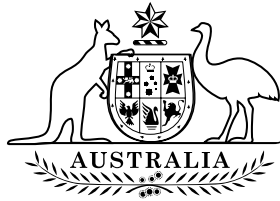
VARIATION No 6

Pattern: Gilbarco Model MACRIP Card-operated Driveway Flowmeter Control Console.

Submittor: Marconi Commerce Systems Australia Limited
12-38 Talavera Road
North Ryde NSW 2113.

1. Description of Variant 7

A Gilbarco model MACRIP card-operated control system which may be used with Commission-approved Gilbarco Enterprise series fuel dispensers for motor vehicles (which are described in the documentation of NSC approval No 5/6A/202).



National Standards Commission
Notification of Change
Supplementary Certificate of Approval No S306
Change No 1

The following changes are made to the approval documentation for the

Gilbarco Model MACRIP Card-operated Driveway Flowmeter Control System

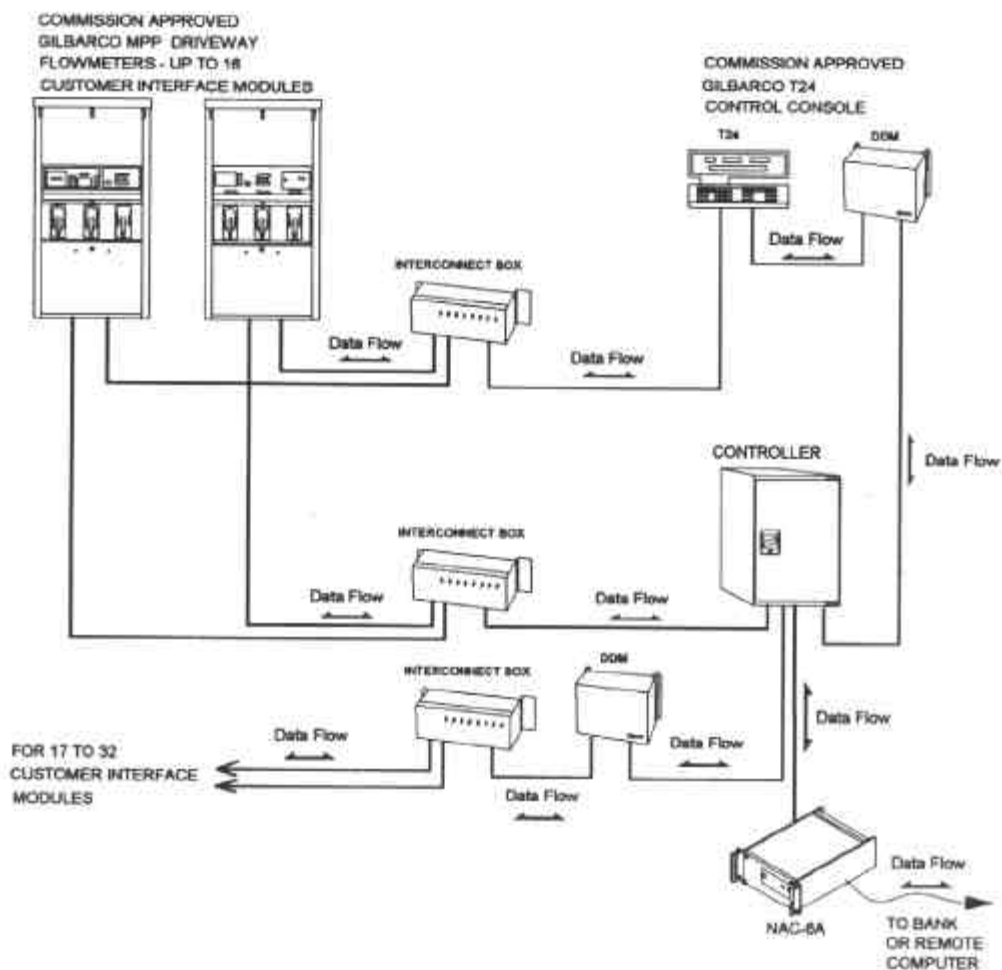
submitted by Gilbarco Aust. Ltd
 12-38 Talavera Road
 North Ryde NSW 2113.

- (a) In Supplementary Certificate of Approval No S306 dated 10 March 1997, the reference to the Supplementary Certificate in the **Filing Advice** should be amended by changing the date to read "10 March 1997".

- (b) In Technical Schedule No S306 Variation No 2 dated 10 May 1996, clause **1.2 Point of Sale System** should be amended by adding "or SRV 5.**," after "SRV 4.**" in the list of software version numbers.

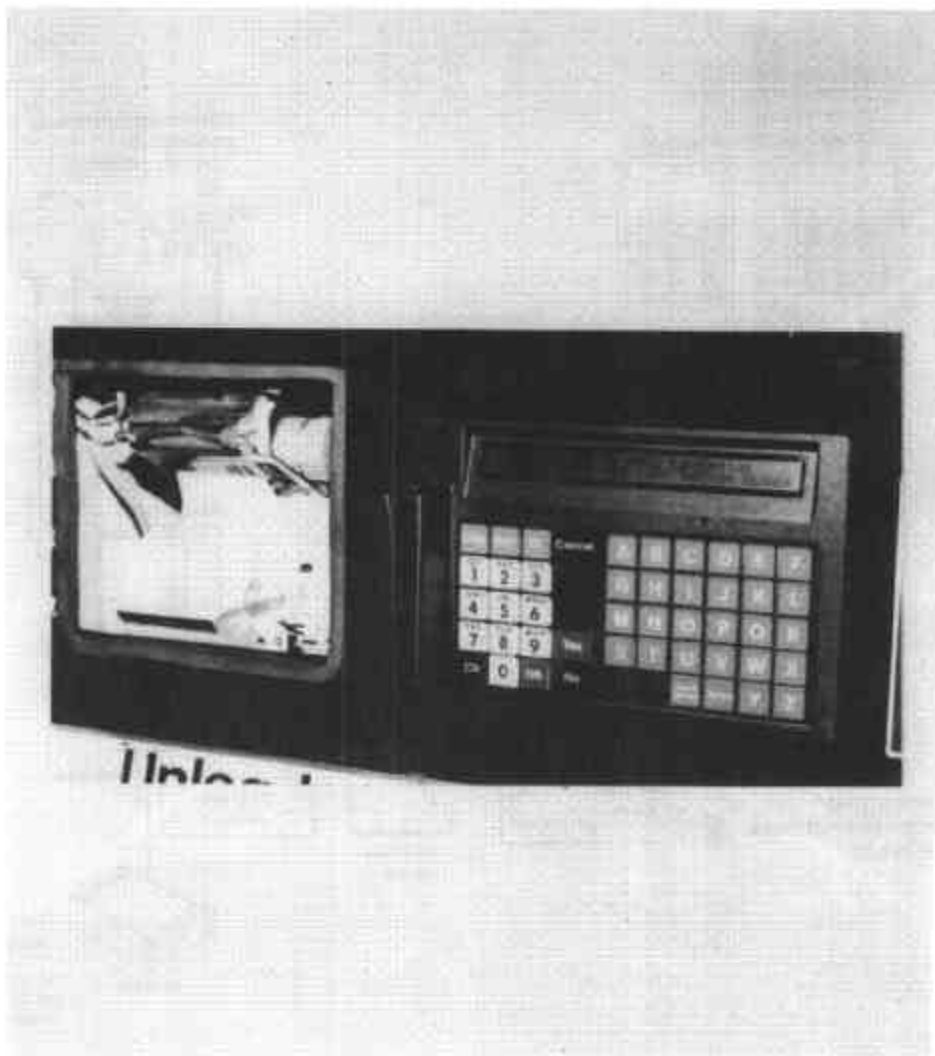
Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

FIGURE S306 - 1



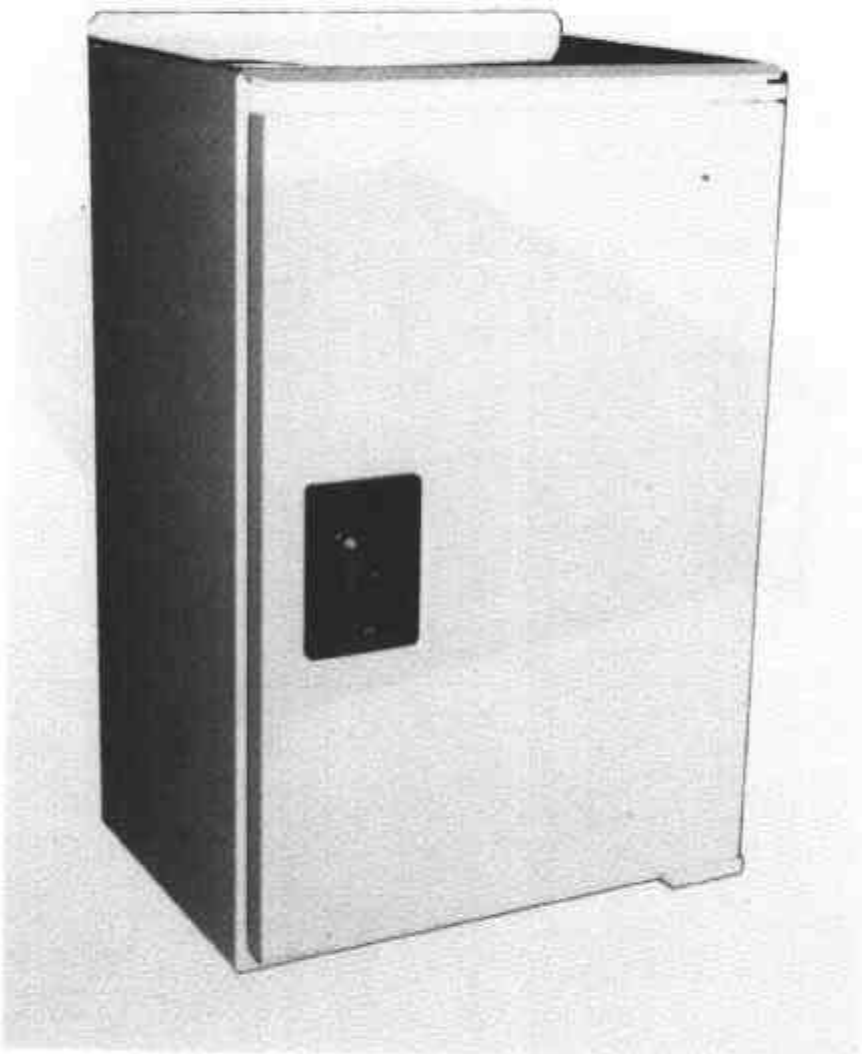
Typical System Incorporating a Gilbarco MACRIP Terminal

FIGURE S306 - 2



Model MACRIP Module

FIGURE S306 - 3



Model T084V Controller

FIGURE S306 - 4



Model NAC-6A Controller

FIGURE S306 - 5



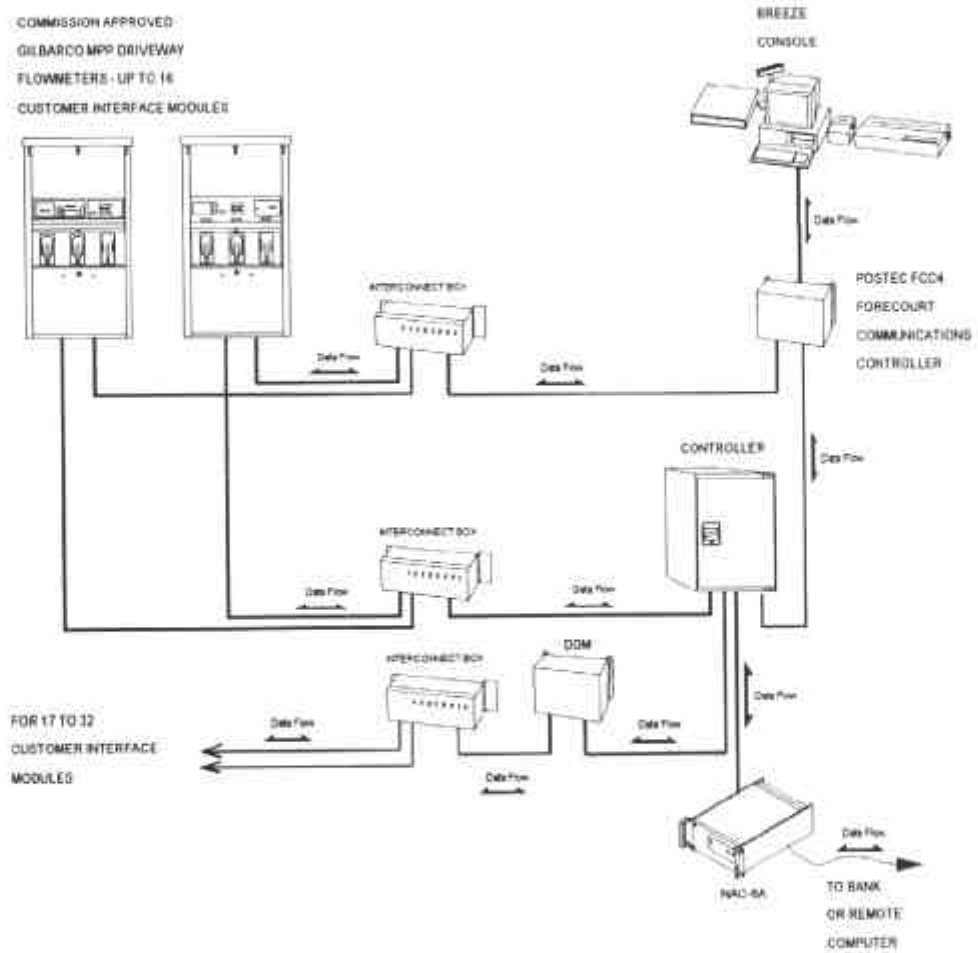
Model T24 Console and Data Distribution Module

FIGURE S306 - 6



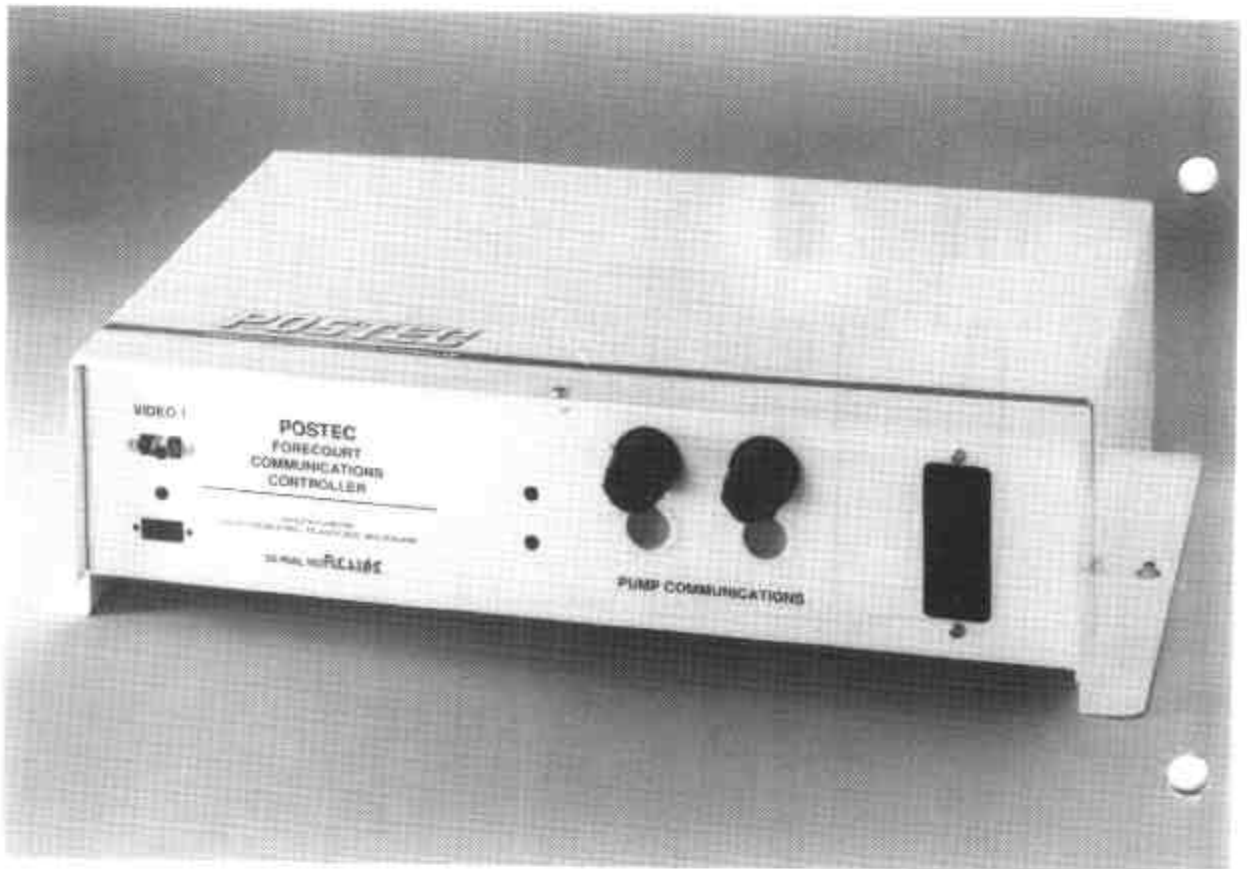
Typical T077/T078/T079 Series Installation

FIGURE S306 - 7



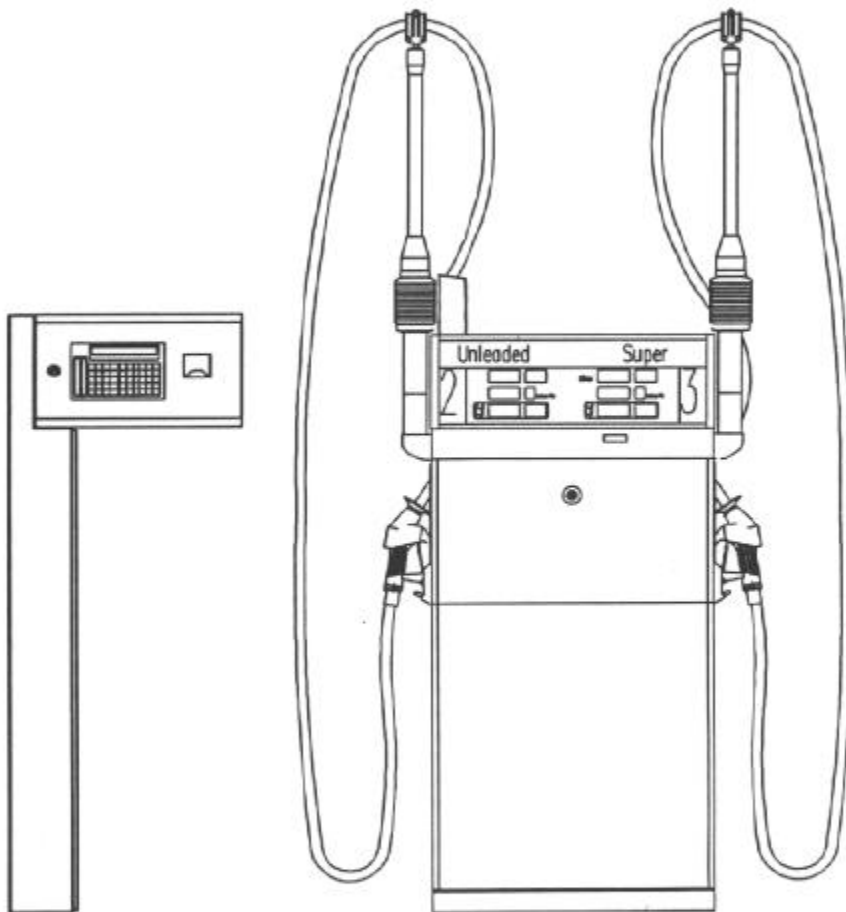
Typical Gilbarco MACRIP System incorporating a Postec Controller and a Breeze POS System (Variant 3)

FIGURE S306 - 8



Postec Model FCC4 Controller

FIGURE S306 - 9



MACRIP Unit in a Typical Pedestal Housing Installation

FIGURE S306 - 10



Typical Production Engineering 7000 Series Driveway Flowmeters Installation

FIGURE S306 - 11



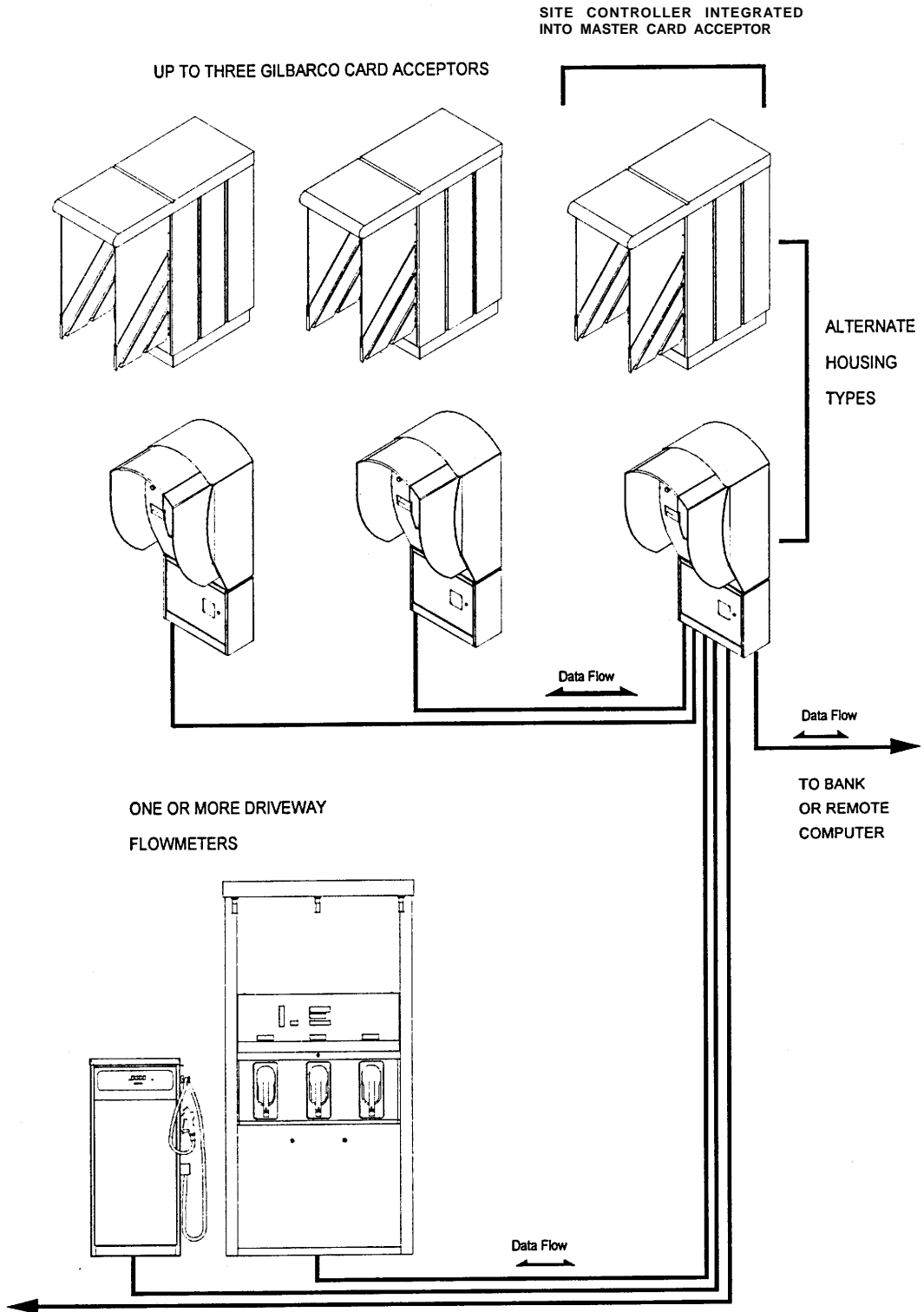
Gilbarco Model MACRIP DCA in 'ICR' Housing

FIGURE S306 - 12



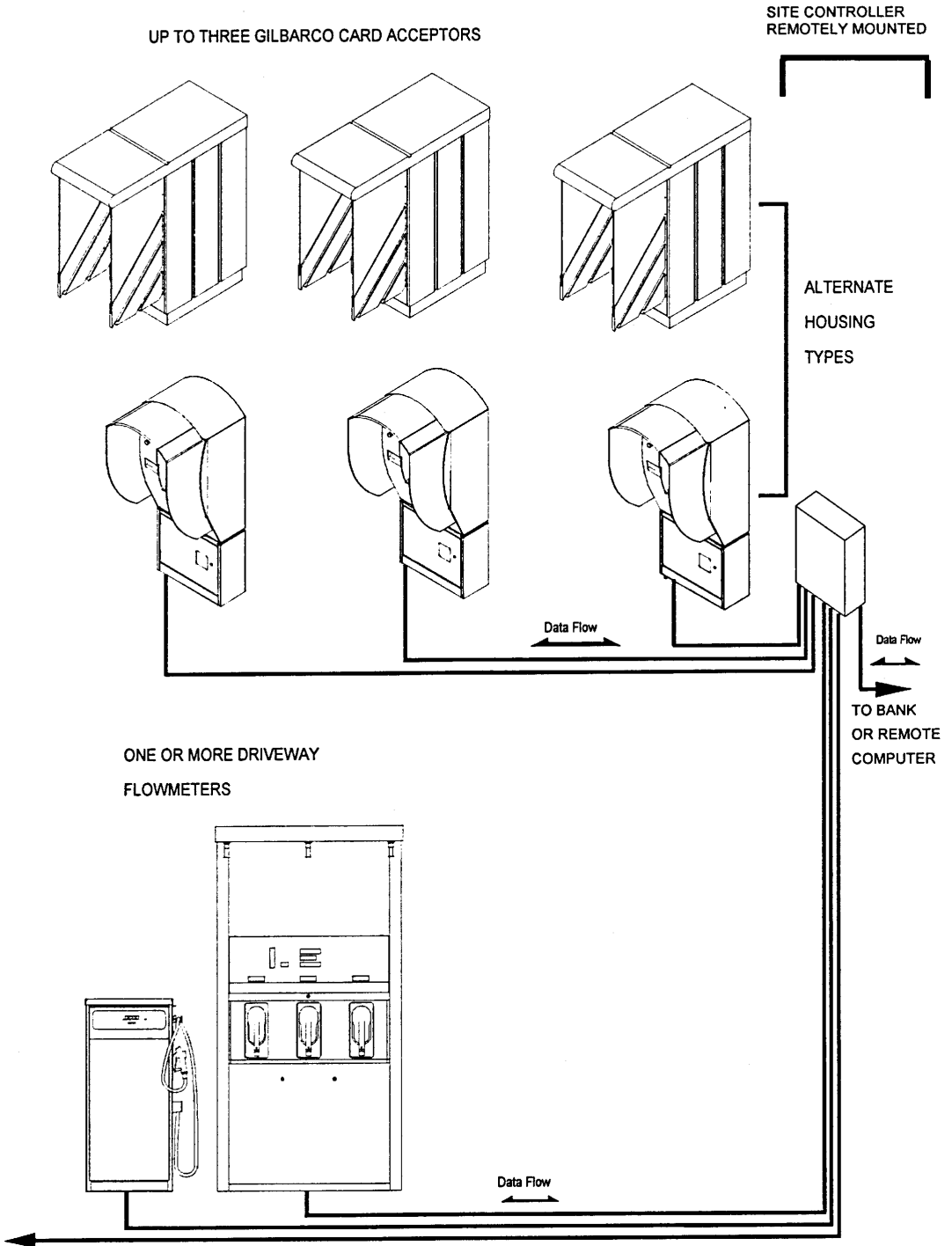
Gilbarco Model MACRIP DCA in 'Truckstop' Housing

FIGURE S306 - 13



System Diagram - Controller Integrated with MACRIP DCA

FIGURE S306 - 14



System Diagram - Controller Remote From MACRIP DCA