line access set

Features

- 2-Wire and 4-Wire Access Loop or E&M Interface
- E&M Supervisory and Address Signaling including On-Hook Indicators
- Dial & Hold Capabilities
- NORM/REV Battery Feed Indicators
- Loop ON-HOOK Indicator
- Loop/Ground Start Seizure
- PBX Port A, B & C Source Simulation
- DTMF/Dial-Pulse Address Signaling
- Loop Termination selection
- Monitor Speaker
- European Model Available, T318BE

Introduction

The Wilcom Model **T318B Line Access Set** provides access to 2-wire and 4-wire facilities. Whether used by telephone companies, common carriers, or private networks. The Model T318B enables quick and efficient interfacing of analog transmission facilities. This unit is particularly useful at the network demarcation point where it is used to simulate network functions towards the customer-owned equipment, or to simulate the customer-owned equipment functions towards the network.

Trunks and lines to PBX's, Automatic Call Distributor's, Key Systems, and Secretarial Answering Systems are accessed from the serving central office or at the network demarcation point. The T318B provides the interface connections required for testing equipment for noise, transmission, signaling and supervision testing on the transmission facility.

Description

Wilcom's Model T318B Line Access Set is a versatile, portable accessory used to compliment transmission and noise measuring sets (TMS); providing direct testing capabilities at the demarcation point. Equipped with convenient front panel switches to interface with a variety of analog transmission facilities, it provides all the necessary supervisory and address signaling functions necessary for line access.



T318B/BE

Interface to the facility being tested, either 2-wire or 4-wire, is made by connection to the WECo 310-type jack labeled LINE. Connection to the TMS is made via the WECo 310-type jacks labeled TMS.

The INTERFACE TYPE, I through V, is switch selectable. A handy chart provides reference to the E or M lead condition, depending on the type selected.

Solid state indicators are provided to show conditions of ON HOOK, NORM/REV Battery Feed, TIP GND wink signal and the application of RINGING.

Dialing is accomplished on the facilities being tested by using the 16-key keyboard of the Model T318B. A handset may be connected to the T318B at the TALK terminals. A modular jack and five-way binding posts are provided in order to accept a wide variety of connections.

Ground-Start circuits can be accessed by the T318B Line Access Set. Operation of the GND START switch connects the ring side of the facility to ground. This condition signals the serving central office of an off-hook condition at the customer's end of the facility.



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Description (Continued)

The serving central office, in response to the GND START signal, will return a tip ground. A TIP GND LED indicates this condition.

An internal **Reference Generator** provides a 0 dBm or -10dBm level tone referenced to 600 ohms. Selection of 404 Hz, 1004 Hz or 2804 Hz is made by pressing the associated lockable switch.

The LINE circuit may be terminated in 900, 600 and 430 ohms or shorted. A balanced 2.16 μ F dc blocking capacitor may be

Specifications

switch selected and placed in series with any one of the terminations including the TR TMS 310-type jack.

The Wilcom Model T318B Line Access Set is powered by ac line voltage. It is housed in a rugged, sturdy, metal case and is designed to withstand the severe conditions that may be encountered in field applications.

All the features required to seize, supervise, signal and control both 2-wire and 4-wire facilities are built-in, easily accessible and quickly mastered. The Model T318B resolves the access dilemma at the demarcation point.

Insertion Loss:			
LINE jack to TMS jack:	Tone Generator:		
<0.25 dB, 200 Hz to 3400 Hz	404 Hz, -2 to +6 Hz		
<0.15 dB, at 1000Hz	1004 Hz, -2 to +14 Hz		
Return Loss:	2804 Hz, -2 to +36 Hz		
LINE jack or TMS jack:	(Lower limits are set to avoid submultiples of the 8 kHz sampling		
<25 dB @ 200 Hz	rate in digital systems)		
>30 dB @ 500 Hz	Terminations:		
>35 dB @ 1000 Hz to 4000Hz	Impedances:		
Longitudinal Balance:	430 $\Omega \pm 1\%$, 5W		
At LINE jack, HOLD position:	600 Ω ± 1%, 3W		
>70 dB, 40 Hz to 500 Hz	900 Ω ± 1%, 3W		
>60 dB, 500 Hz to 4000 Hz	SHORT		
At LINE jack, BATT FEED position:	TMS (terminates into external measuring set)		
>60 dB, 40 Hz to 200 Hz	DC BLOCKING:		
>70 dB, 200 Hz to 500Hz	Balanced 2.16 μ F ±2% 400V switch selectable		
>60 dB, 500 Hz to 4000 Hz	dc Power Supply:		
Resistance at LINE jack:	Output Voltage:		
MEASURE Selected	52 Vdc ± 2 Vdc		
Tip-Ring:	Output Current:		
Hold or BATT FEED position, 430 Ω Max.	100 mA max.		
DISConnect position, >10 M Ω	ac Power Supply:		
Tip-Gnd or Ring-Gnd, > 10 M Ω	<u>T318B</u> <u>T318BE</u>		
Ring Trip Circuit:	Input Voltage: 115Vac ±10%, 50/60 Hz 220Vac±10%,50/60 Hz		
Operating current, dc: 16 mA or greater	Power:	25 watts	25 watts
Non-operating current dc: 8 mA or less	Dimensions:		
Operating Time: <200 ms @ 20 mA dc	Width:	14.66 in	(347.7mm)
Non-Trip Conditions:	Height:	5.785 in	(134.14mm)
Transients from capacitive leads up to 8 μ F	Depth:	10.625 in	(239.70mm)
Ringing current up to 200 mA @ 16 Hz or greater	Weight:	13 lbs 12 oz.	(6 kg)
PBX PORTS:			
CLASS A - 16 mA into 200 Ω	CLEI CODE:	NDTAAA01AA	
CLASS B - 20 mA into 600 Ω			
CLASS C - 20 mA into 1300 Ω	Wilcom Part Numbers:		
Circuit Noise:			
<i>C-Message Weighting:</i> <0 dBrnC	T318I		8034
Ringing Generator:	T318I	BE 3031	8050
Frequency: 20 Hz ± 2 Hz or 30 Hz ± 2 Hz			
55 Vrms min. with REN3			
50 Vrms min. with REN5			
-52 Vdc superimposed			
			Wilcom

Specifications and prices are subject to change without notice. 03-99 811-548-004 P.O. Box 508, Laconia, NH 03247 Tel: (603) 524-2622 or (800) 222-1898, Fax: (603) 524-3735 www.wilcominc.com

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