

DEPARTMENT OF TRADE AND COMMERCE STANDARDS BRANCH



OTTAWA February 20, 15, 63.

NOTICE OF APPROVAL

FOR

SANGAMO TYPE "KYL-" COMBINATION POLYPHASE WATTHOUR METER AND THERMAL KVA DEMAND METER

Apparatus

Types KYLA and KYLS

Network for use on 2 wires and neutral of a 3-phase 4-wire Y circuit

	Voltages	120, 240,	277 and 34	5 volts
	Current Range (amperes)	0.6-50	1.2-100	2.5-200
×	Full Scale Demand (KVA)	12	24	43
٠	Multiplier	10	20	40
	Disc constant Kh	3.6	7.2	14.4
	Register Ratio	333-1/3	333-1/3	333-1/3
	Scale	1200 volt	amperes and	1.2 kva
	Single Phase KVA Test Constant	1.0	-	

Note:

Network meters must not be used on a 3-phase 3-wire service

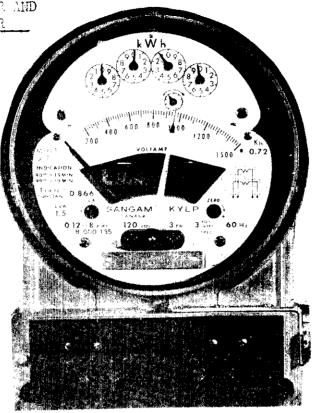
Types KYLP#and KYLS

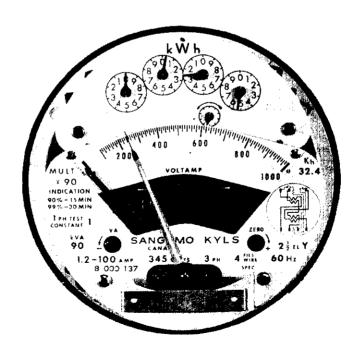
For use on a 3-phase 3-wire service

	Voltages	120, 240, 430 and 600 volts				
	Current Range (amperes)	0.12-8	0.3-25	0.6-50	1.2-100	2.5-200
Å	Full Scale Demand (KVA)	1.5	5	10	20	40
A	Multiplier	1	5	10	20	40
Å	Disc Constant Kh	0.72	1.8	3.6	7.2	14.4
	Register Ratio	166-2/3	333-1/3	333 – 1/3	333-1/3	333-1/3
	Scale	1500 vol	tamperes	and 1.5 KVA	on 8 amp.	meters.
				and 1.0 KVA		
	Single Phase KVA Test Constant	0.866	-			_

[#] Maximum current Rating on P base meters is 100 amperes.

SANGALO TYPE "KYL-" COMBINATION POLYPHASE WATTHOUR METER AND THERMAL KVA DEMAND METER





<u>Note:</u>

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Meters designed for use on a 3-phase 3-wire service must not be used on a network service or on a 3-phase 4-wire Y service with delta-connected CT's.

2 1/2 Element Y

For use on a 3-phase 4-wire Y service

	120, 240, 277 and 345 volts					
Current Range (amperes)	0.12-8	0.3-25	0.6-50	1.2-100	2.5-200	
Full Scale Demand (KVA)	3.0	9	18	36	72	
Multiplier	2	7.5	15	30	60	
Disc Constant Kh	1.03	2.7	5.4	10.8	21.6	
Register Ratio	222-2/9	333-1/3	333-1/3	333-1/3	333-1/3	
Scale	1500 vol	tamperes	and 1.5 i	WA on S a	mpere meters	
	1200 vol	tamperes	and 1.2 H	KVA on all	other ratings	
Single Phase KVA Test Constant	1.0	_			-	
Frequency (all ratings)	50 hz and 60 hz					
Indication (all ratings)	90% in 15 minutes, 99% in 30 minutes					
	All regi	sters hav	e test di	ials.		
	Multiplier Disc Constant Kh Register Ratio Scale Single Phase KVA Test Constant Frequency (all ratings)	Current Range (amperes) Full Scale Demand (KVA) Multiplier Disc Constant Kh Register Ratio Scale Scale Single Phase KVA Test Constant Frequency (all ratings) Indication (all ratings) O.12-8 3.0 0.12-8 1.03 1.03 1.03 1.00 1.200 vol 1.200 vol 1.00 50 hz an 1.00	Current Range (amperes) Full Scale Demand (KVA) Multiplier Disc Constant Kh Register Ratio Scale Single Phase KVA Test Constant Frequency (all ratings) Indication (all ratings) O.12-8 0.3-25 9 27.5 1.03 2.7 222-2/9 333-1/3 1500 voltamperes 1200 voltamperes 1.0 50 hz and 60 hz 100 in 15 minutes	Current Range (amperes) 0.12-8 0.3-25 0.6-50 Full Scale Demand (KVA) 3.0 9 18 Multiplier 2 7.5 15 Disc Constant Kh 1.03 2.7 5.4 Register Ratio 222-2/9 333-1/3 333-1/3 Scale 1500 voltamperes and 1.5 1200 voltamperes and 1.5 Single Phase KVA Test Constant 1.0 50 hz and 60 hz Indication (all ratings) 90% in 15 minutes, 99% in	Current Range (amperes) 0.12-8 0.3-25 0.6-50 1.2-100 Full Scale Demand (KVA) 3.0 9 18 36 Multiplier 2 7.5 15 30 Disc Constant Kh 1.03 2.7 5.4 10.8 Register Ratio 222-2/9 333-1/3 333-1/3 333-1/3 Scale 1500 voltamperes and 1.5 KVA on 3 a Single Phase KVA Test Constant 1.0 Frequency (all ratings) 50 hz and 60 hz	

Full scale value, multiplier and disc constant are given for 120 volts.

For other voltages multiply by the voltage ratio (for 277 volts use 2.5).

Multiplier applies to both watthour and demand readings.

Meters for use on 3-phase 3-wire, and 3-phase 4-wire Y services and rated at 0.12-3 amperes are available in "F" base mounting and all the voltages listed for the types KYLP and KYLS.

All registers have test dials.

Description

The type "KYL_" Combination Polyphase Watthour Meter and Thermal "KVA" Demand Meter consists of the type "KY_" polyphase watthour meter receiving approval under "E_60" with the thermal demand element of the type "LY_" receiving approval under E_64.

As the demand section of the type "KYL-" is a rectifier type of instrument, it is independent of power factor but is subject to errors due to waveform distortion, and should only be verified on a test board known to produce a waveform having low harmonic content, particularly if a wattmeter or rotating standard is used as a reference.

The "I ph test constant" shown in the illustrations will be changed to "Constante D'essai, Test Constant KVA 1 ph".

Approval granted to:

Sangamo Company Limited, Leaside, Toronto 17

W.J. France

J. S. T. Swanson, Chief, Standards Laboratory, Standards Branch. W. J. S. Fraser, Chief, Electricity and Gas Division, Standards Branch.

Reference SL-100-93A