Dyna-Doctor Service Software Overview

Dyna Doctor

Technical Call

This presentation is not intended to be an all inclusive troubleshooting and unit operation explanation but rather a look at navigation and information Dyna Doctor provides. Introductory level information on connection and navigation after software installation.

Dyna Doctor

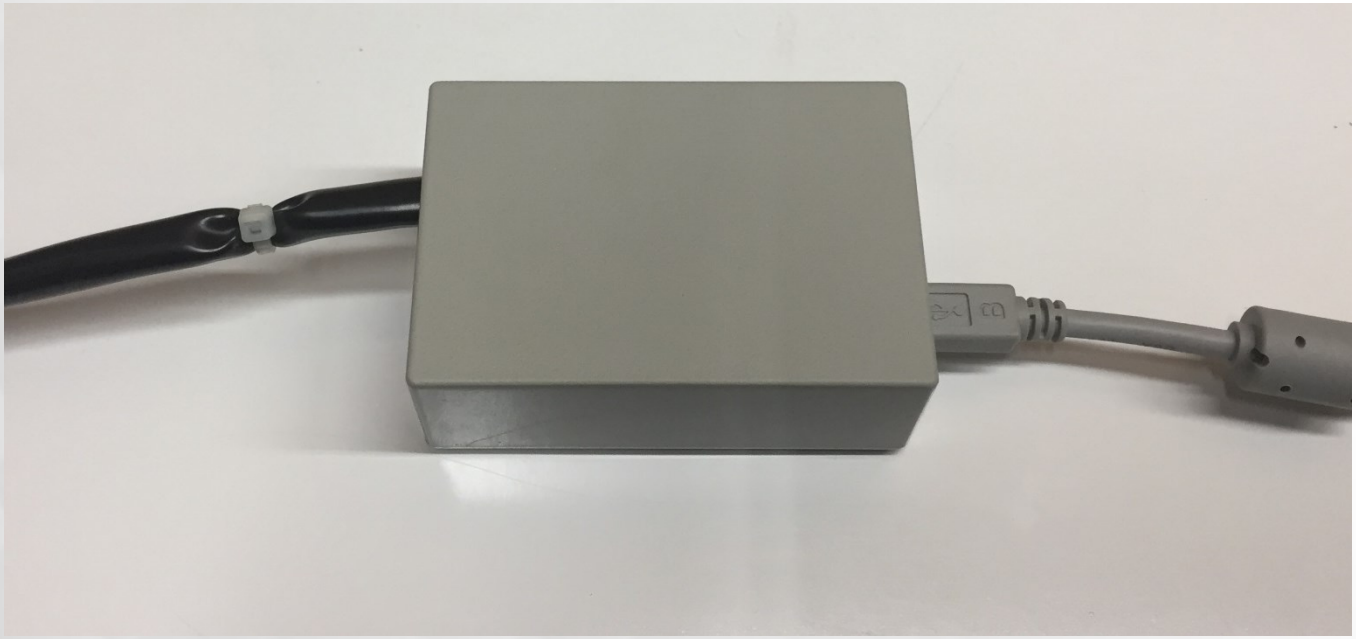
Technical Call

Dyna-Doctor is to be used on Toshiba Carrier systems and cannot be connected to Carrier Bryant VRF systems.

Dyna Doctor

Technical Call

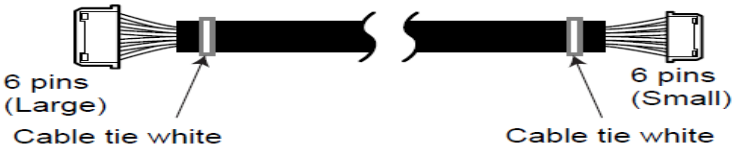
Dyna-Doctor is available with the part number **TCB-DK01SS-E** communication adapter.



Dyna Doctor

Technical Call

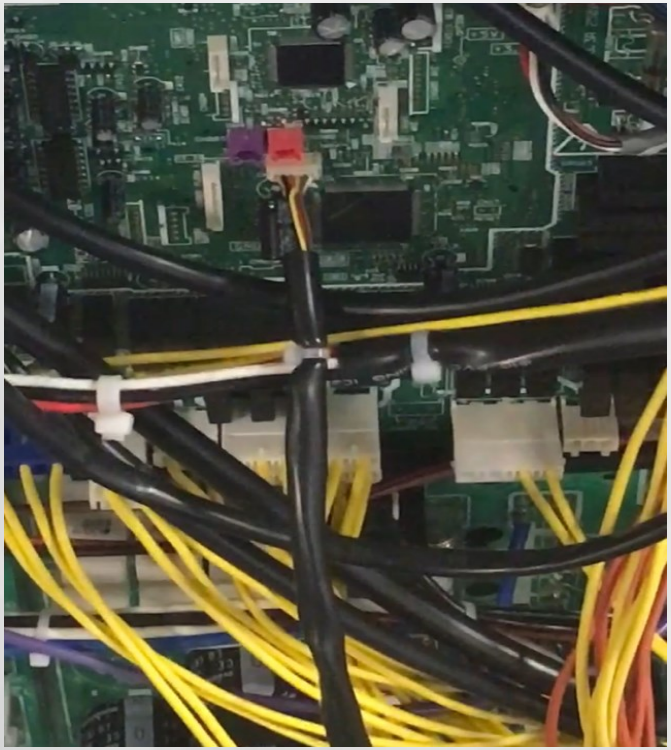
The accessory connector will have a connection to the outdoor unit board and to the Dyna Doctor adapter. Cable used depends on system to be connected.

Cable type	Appearance DYNA-KIT side — Air conditioner side	Representative Air conditioner
A	 8 pins 8 pins Cable tie white Cable tie Black A black cable tie is attached to the cable on air conditioner side. Be careful with it. It is prone to come off.	SDI Series (Outdoor unit) (*) DI Series (Outdoor unit) (*) IMS Series (Outdoor unit) (*) Air to Water Heat Pump (Hydro unit) *: Connector type may differ with some models.
B	 6 pins (Large) 6 pins (Large) Cable tie white Cable tie Black A black cable tie is attached to the cable on air conditioner side. Be careful with it. It is prone to come off.	SDI Series (Outdoor unit) (*) DI Series (Outdoor unit) (*) IMS Series (Outdoor unit) (*) • For Japan SPE Series (Outdoor unit) (*) SME Series (Outdoor unit) (*) *: Connector type may differ with some models.
C	 6 pins (Large) 6 pins (Small) Cable tie white Cable tie white	MiNi-SMMS (Outdoor unit) SMMS (Outdoor unit) SHRM (Outdoor unit) • For Japan SMMS (Outdoor unit) FLEX (Outdoor unit)

Dyna Doctor

Technical Call

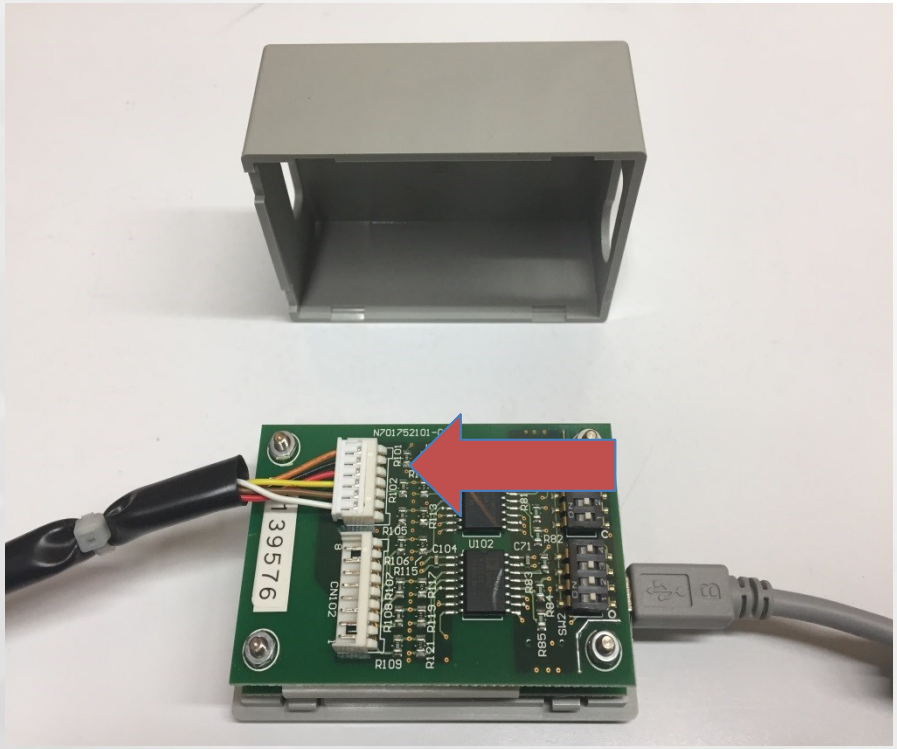
Connection for system **operation** and **monitoring** is done from outdoor unit PC board only. CN800



Dyna Doctor

Technical Call

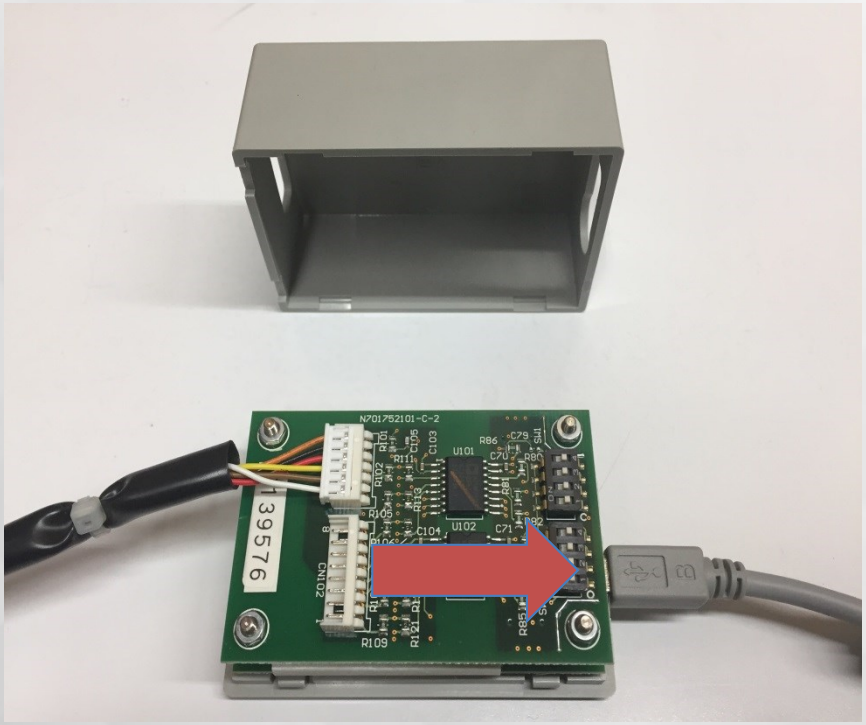
Connect the other connector end to Dyna Doctor Adapter as shown.



Dyna Doctor

Technical Call

Once connected to the outdoor board and adapter, connect the mini USB end of the accessory cable to the Dyna Doctor adapter and the USB end to the computer.



Dyna Doctor

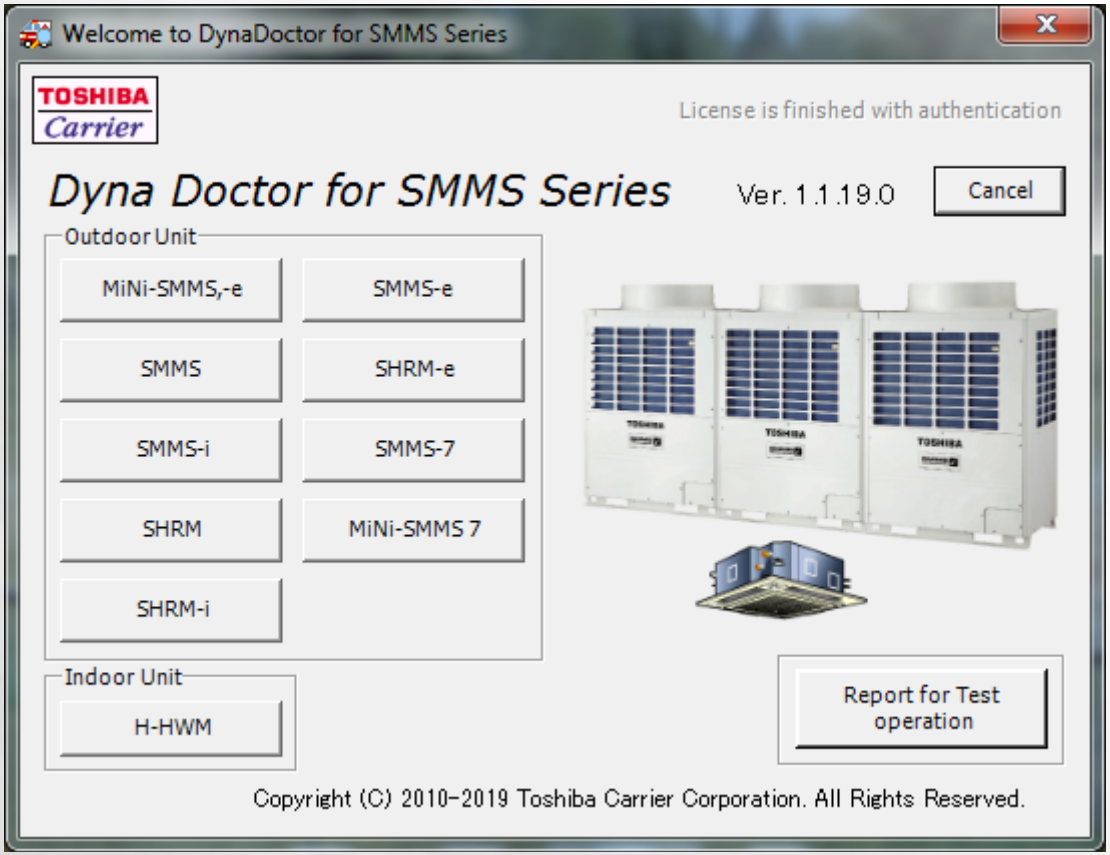
Technical Call

Open Dyna Doctor software from the shortcut icon on the desktop.

Dyna Doctor

Technical Call

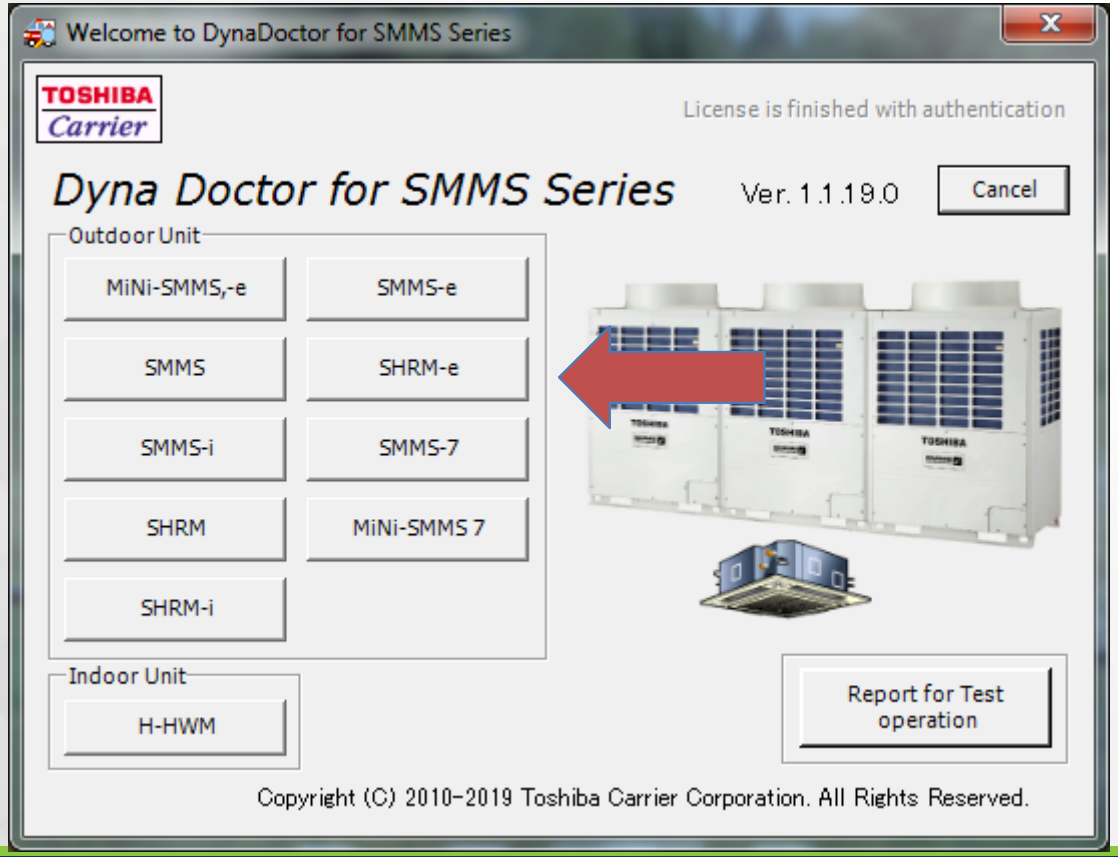
When the software opens you will need to select the unit type to be monitored.



Dyna Doctor

Technical Call

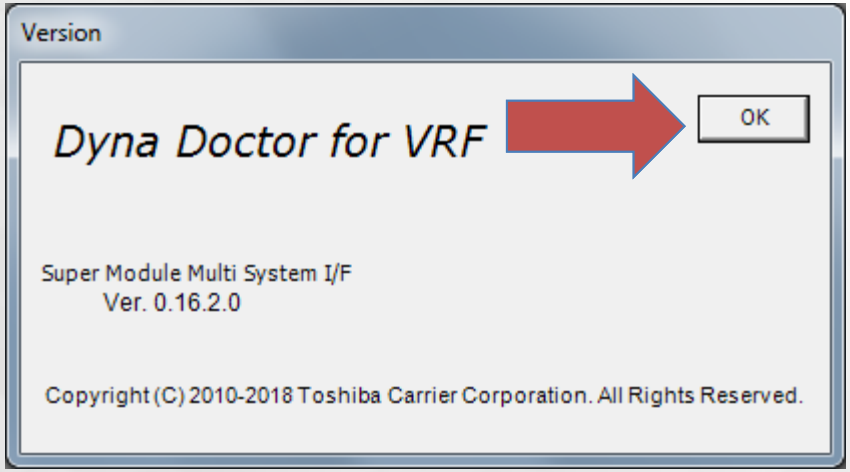
For this presentation we will select e series Heat Recovery or SHRM-e.



Dyna Doctor

Technical Call

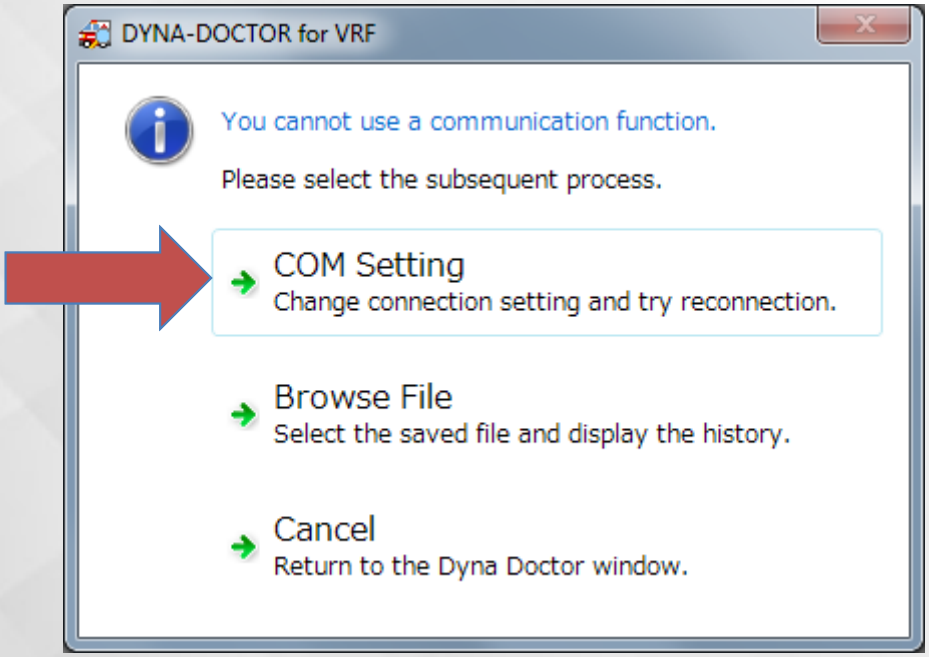
Next will be a page with the below, click OK.



Dyna Doctor

Technical Call

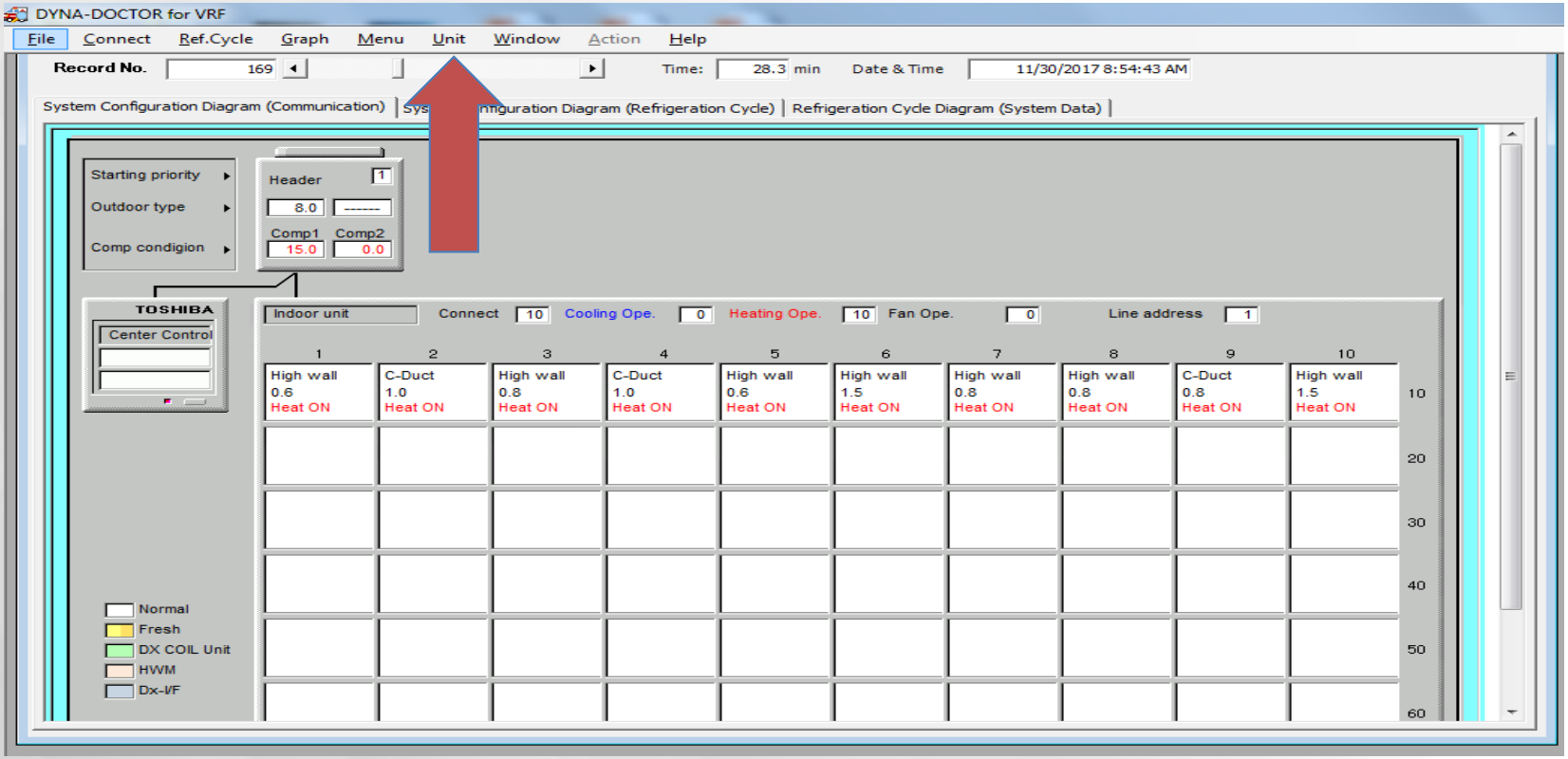
Next will be a box to select how to connect. We can choose live connection with COM Setting, Browse File to view a recorded file or Cancel to go back.



Dyna Doctor

Technical Call

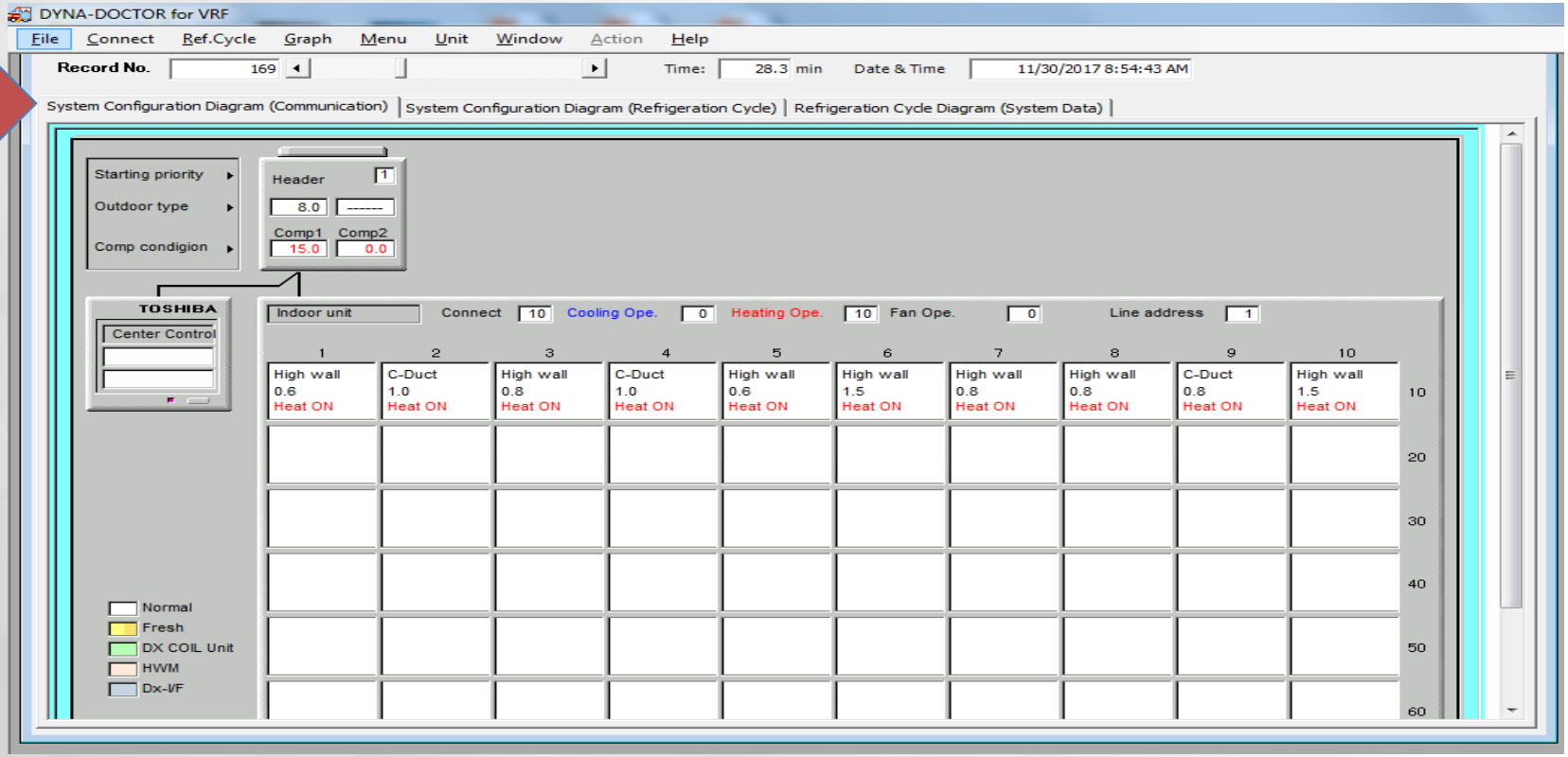
Next after opening select Unit. Drop down menu allows to set for PSI, Tons, Fahrenheit.



Dyna Doctor

Technical Call

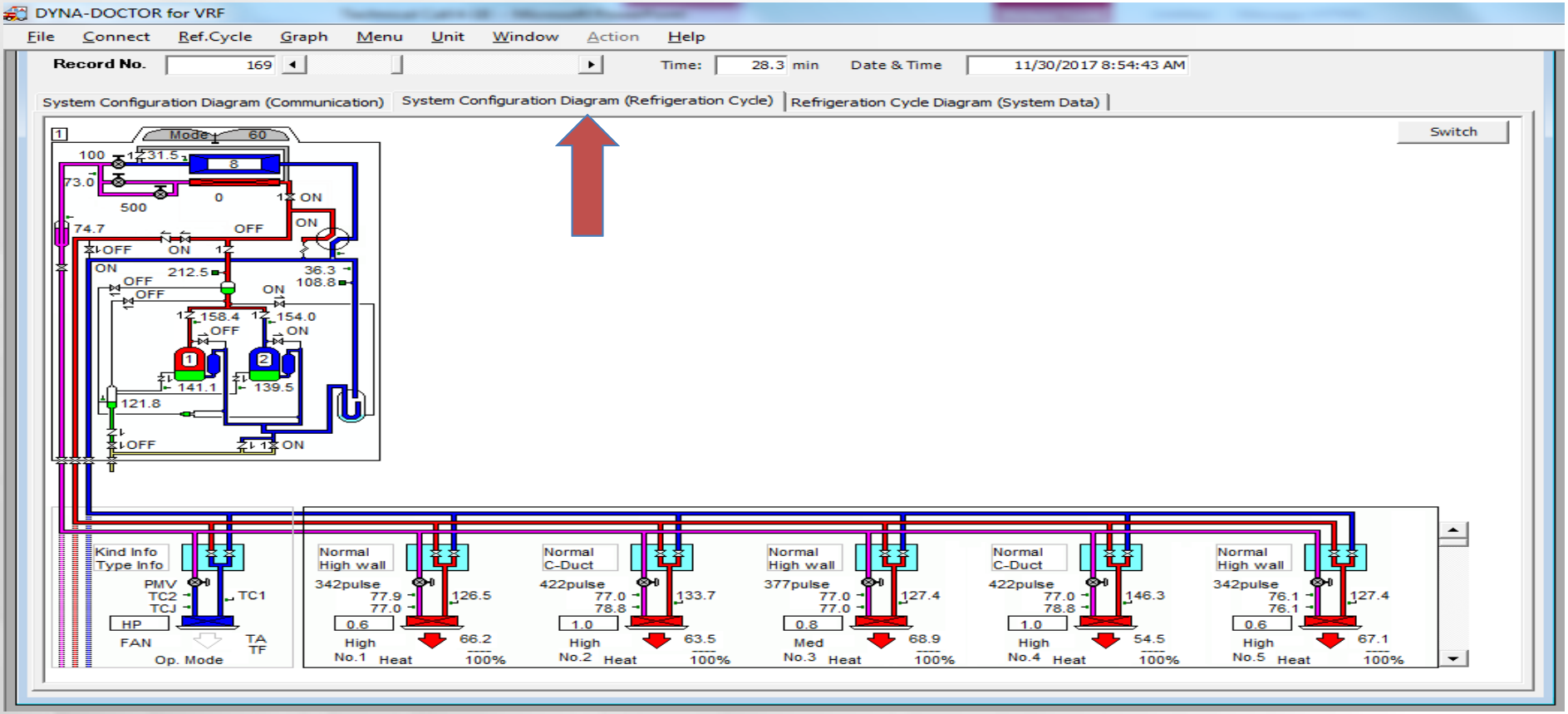
First page opened is the System Communication. I call it the connected information page.



Dyna Doctor

Technical Call

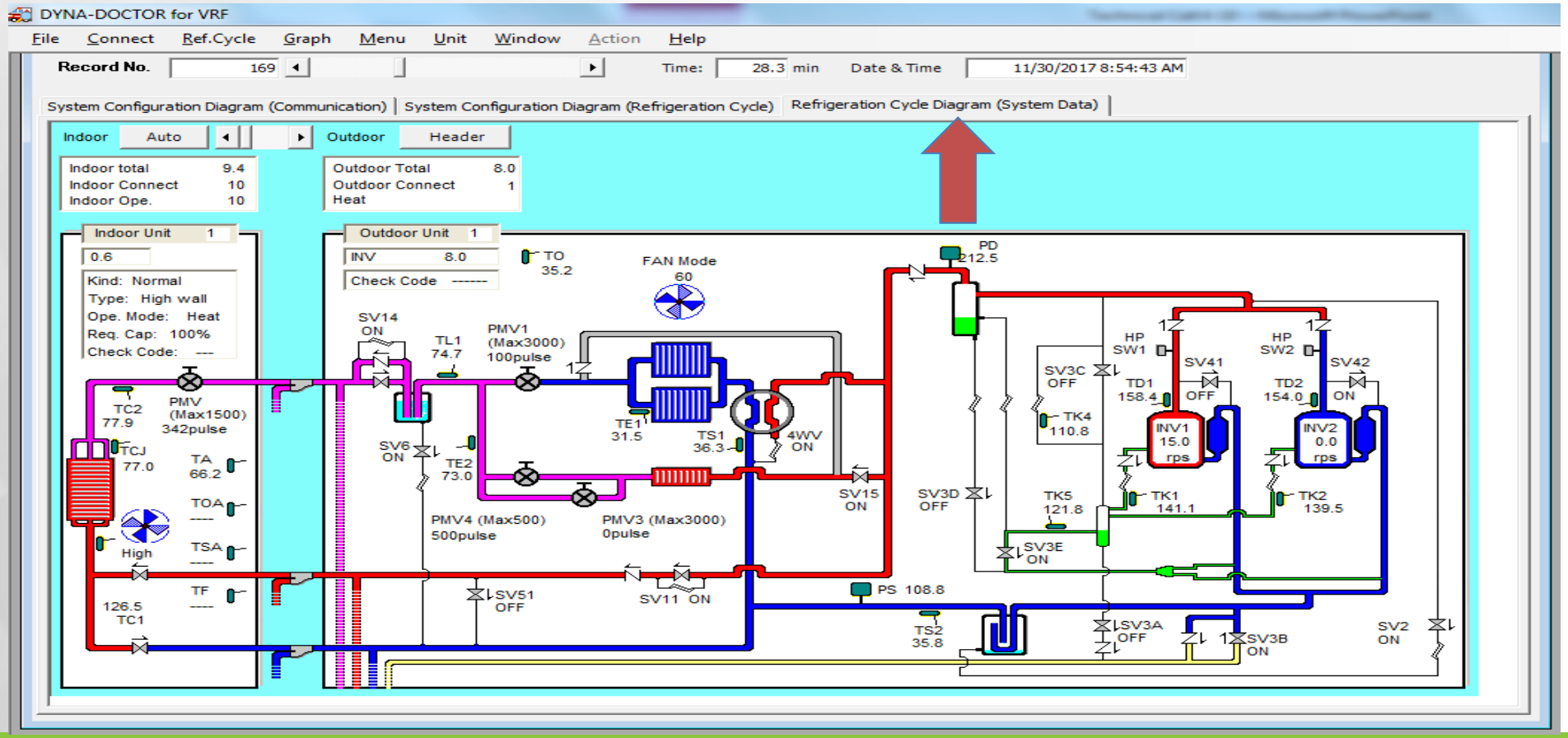
Next is Refrigerant Cycle.



Dyna Doctor

Technical Call

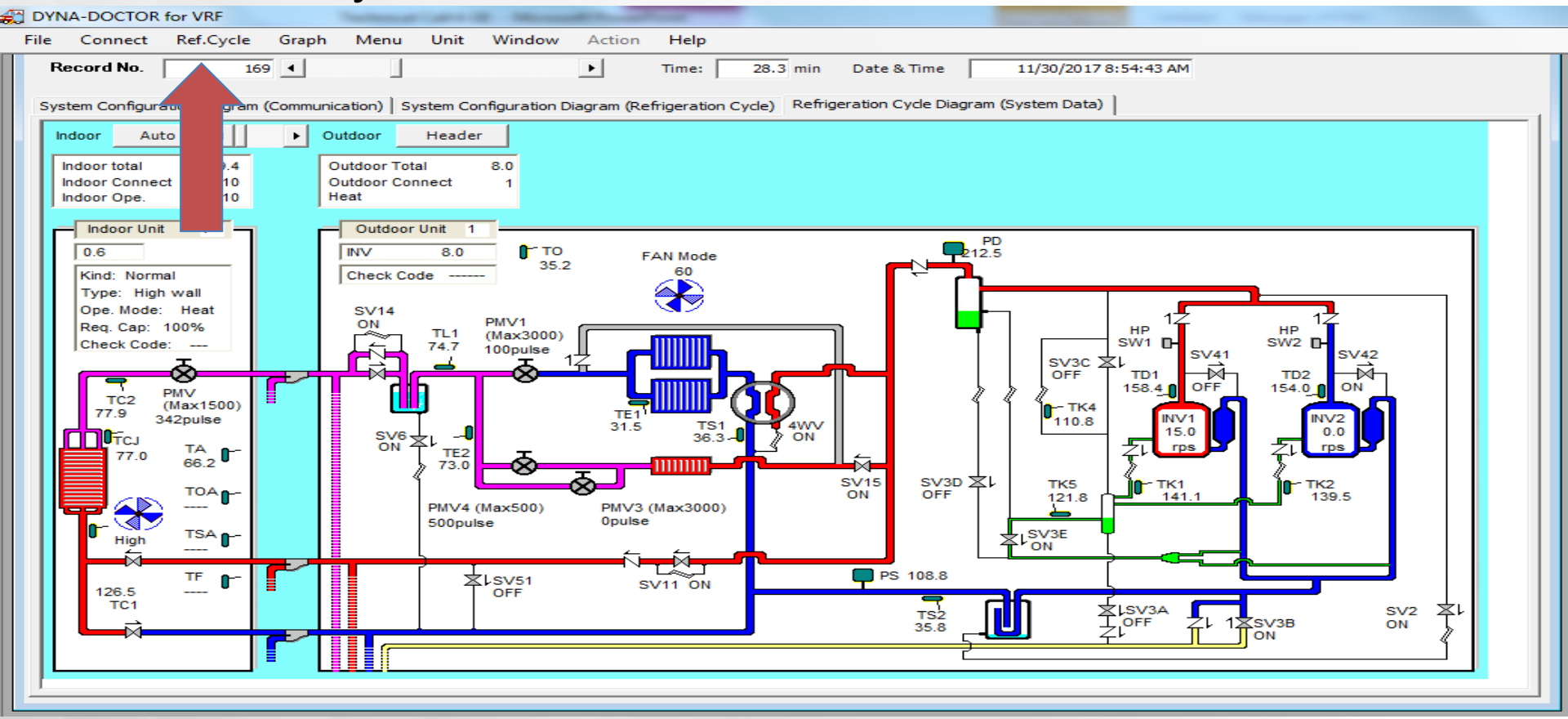
Next is Refrigerant Cycle System Data.



Dyna Doctor

Technical Call

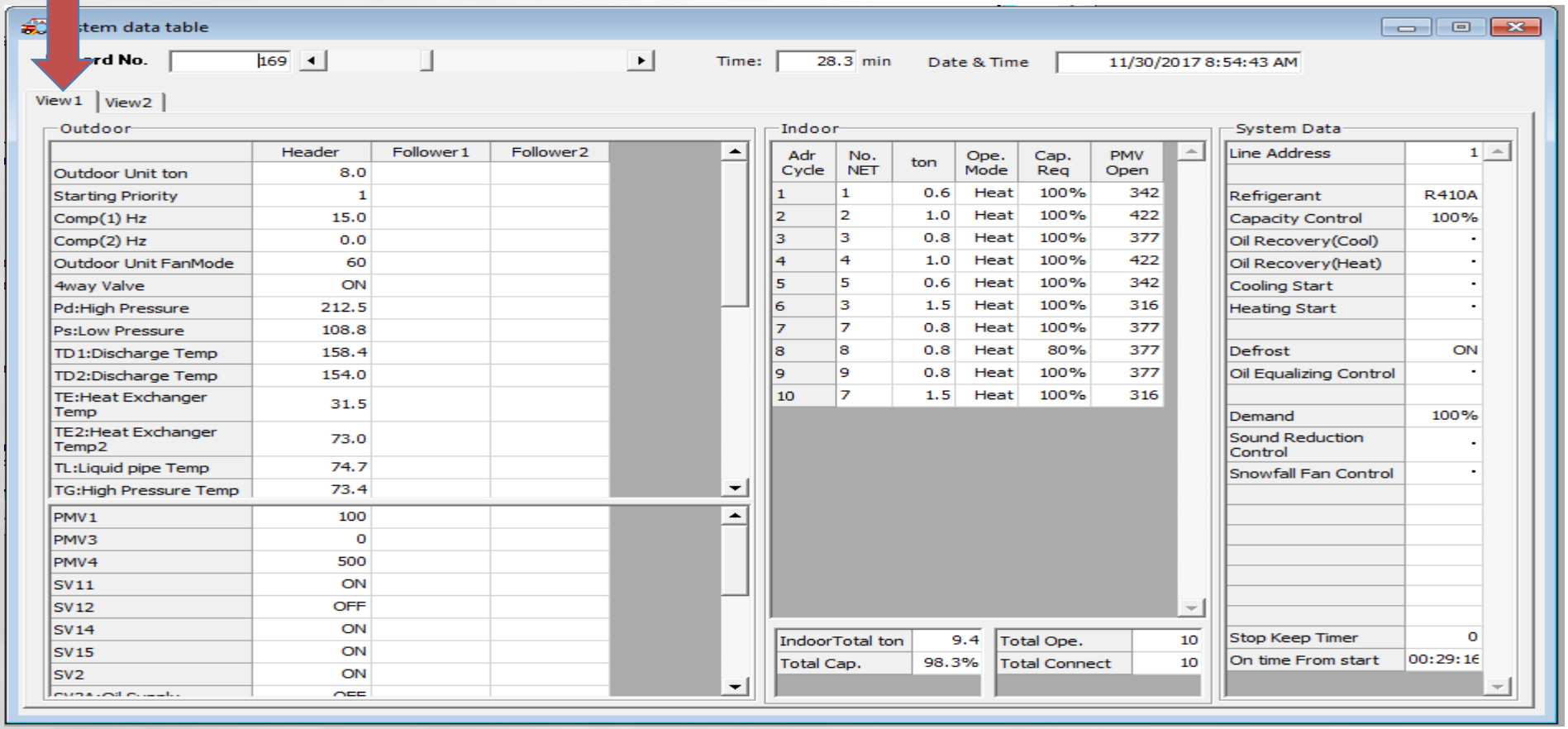
Click Ref. Cycle. Drop down box will show and choose List Data-System Data



Dyna Doctor

Technical Call

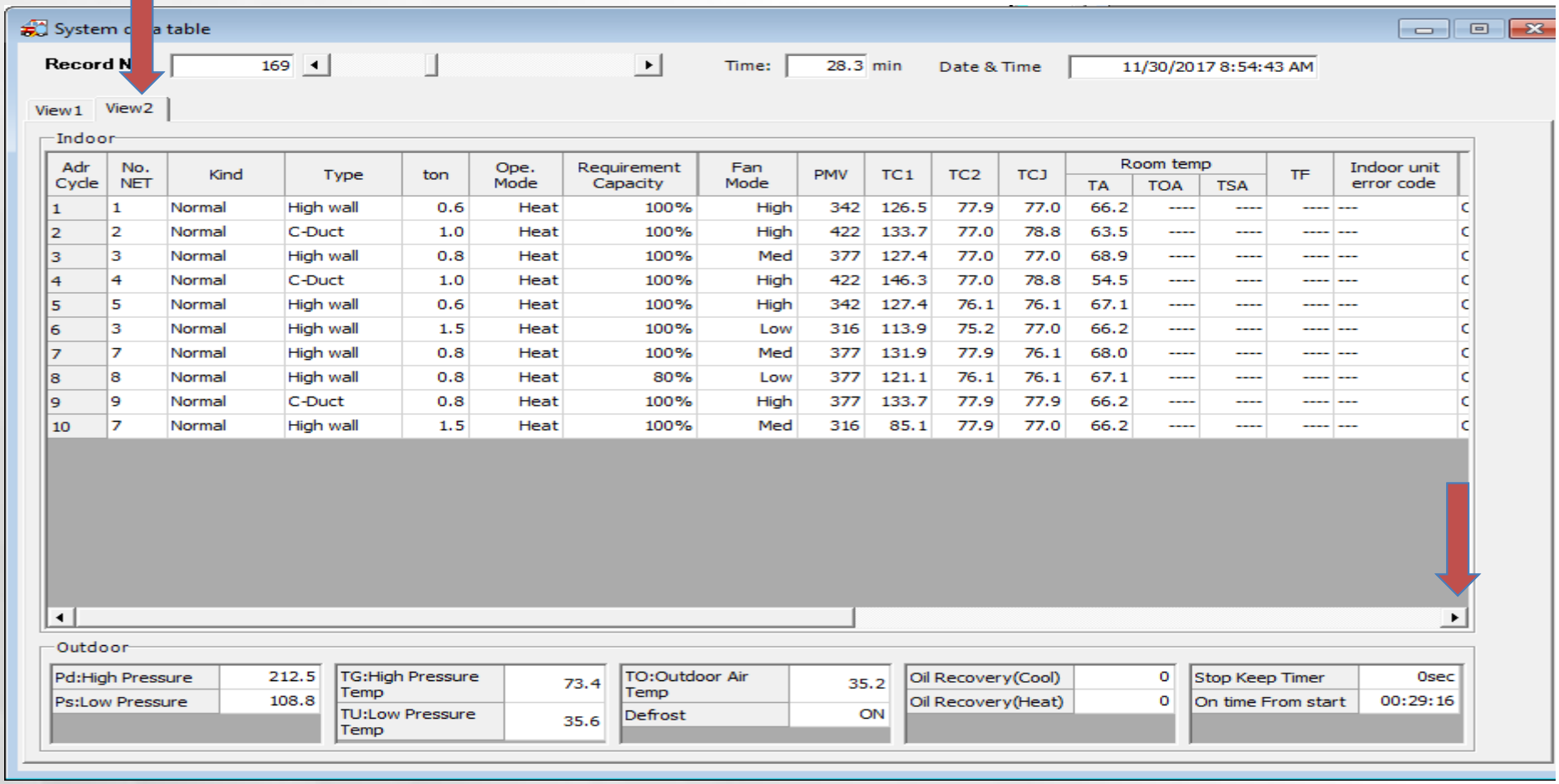
View 1 shows unit data. Major information all on 1 page.



Dyna Doctor

Technical Call

View 2 shows unit data. Indoor information all on 1 page.

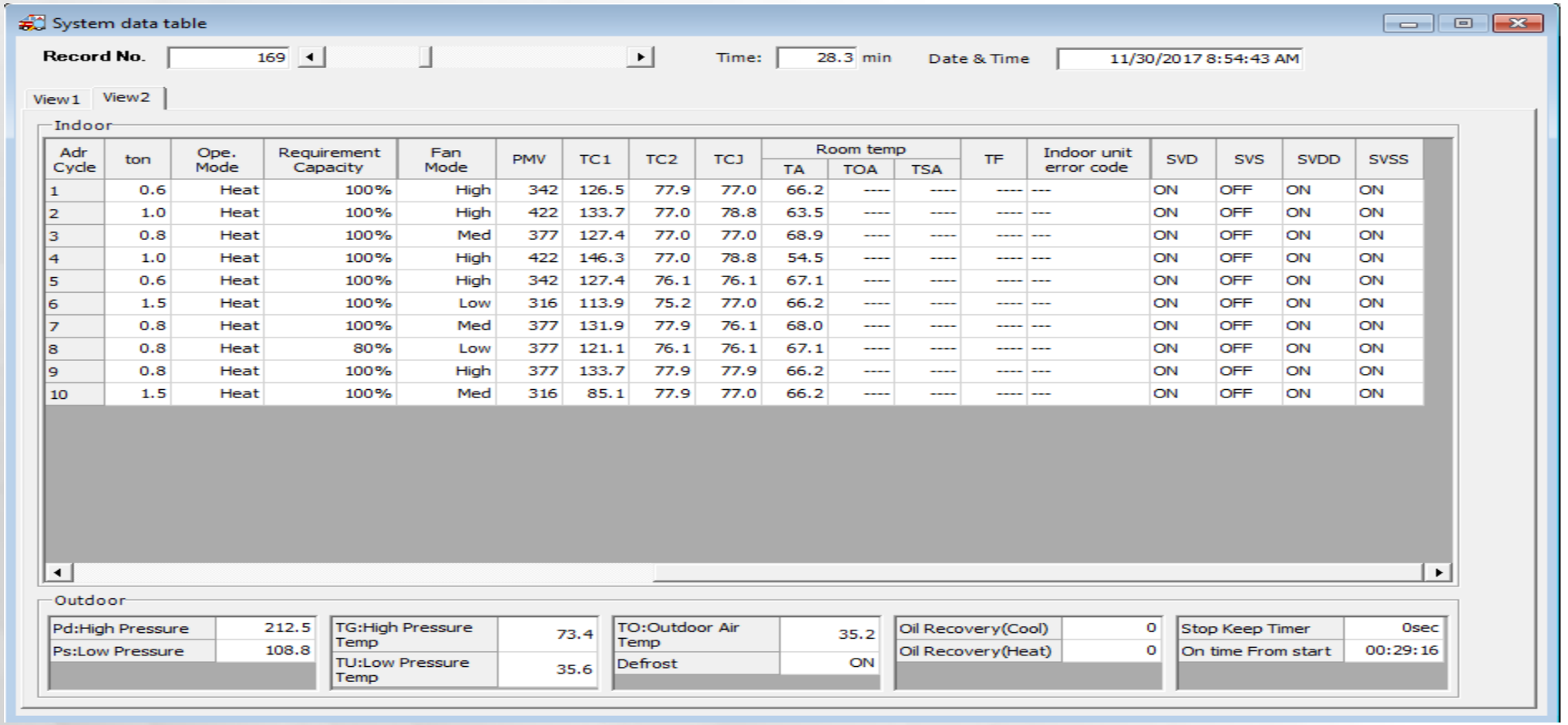


Adr Cycle	No. NET	Kind	Type	ton	Ope. Mode	Requirement Capacity	Fan Mode	PMV	TC1	TC2	TCJ	Room temp TA	Room temp TOA	Room temp TSA	TF	Indoor unit error code
1	1	Normal	High wall	0.6	Heat	100%	High	342	126.5	77.9	77.0	66.2	----	----	----	---
2	2	Normal	C-Duct	1.0	Heat	100%	High	422	133.7	77.0	78.8	63.5	----	----	----	---
3	3	Normal	High wall	0.8	Heat	100%	Med	377	127.4	77.0	77.0	68.9	----	----	----	---
4	4	Normal	C-Duct	1.0	Heat	100%	High	422	146.3	77.0	78.8	54.5	----	----	----	---
5	5	Normal	High wall	0.6	Heat	100%	High	342	127.4	76.1	76.1	67.1	----	----	----	---
6	3	Normal	High wall	1.5	Heat	100%	Low	316	113.9	75.2	77.0	66.2	----	----	----	---
7	7	Normal	High wall	0.8	Heat	100%	Med	377	131.9	77.9	76.1	68.0	----	----	----	---
8	8	Normal	High wall	0.8	Heat	80%	Low	377	121.1	76.1	76.1	67.1	----	----	----	---
9	9	Normal	C-Duct	0.8	Heat	100%	High	377	133.7	77.9	77.9	66.2	----	----	----	---
10	7	Normal	High wall	1.5	Heat	100%	Med	316	85.1	77.9	77.0	66.2	----	----	----	---

Dyna Doctor

Technical Call

Scroll over shows FS box valve information. Single FS box only.

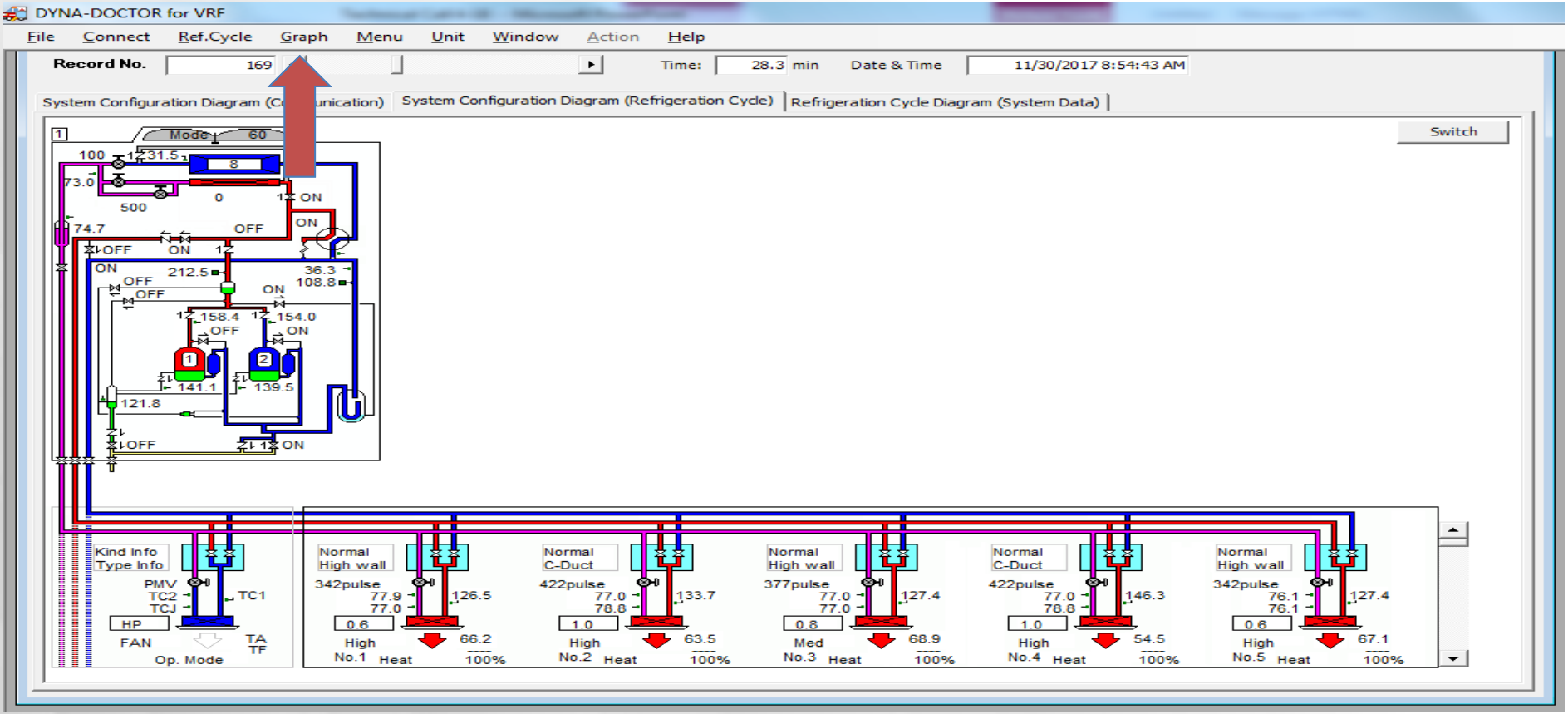


Adr Cycle	ton	Ope. Mode	Requirement Capacity	Fan Mode	PMV	TC1	TC2	TCJ	Room temp TA	Room temp TOA	Room temp TSA	TF	Indoor unit error code	SVD	SVS	SVDD	SVSS
1	0.6	Heat	100%	High	342	126.5	77.9	77.0	66.2	----	----	----	---	ON	OFF	ON	ON
2	1.0	Heat	100%	High	422	133.7	77.0	78.8	63.5	----	----	----	---	ON	OFF	ON	ON
3	0.8	Heat	100%	Med	377	127.4	77.0	77.0	68.9	----	----	----	---	ON	OFF	ON	ON
4	1.0	Heat	100%	High	422	146.3	77.0	78.8	54.5	----	----	----	---	ON	OFF	ON	ON
5	0.6	Heat	100%	High	342	127.4	76.1	76.1	67.1	----	----	----	---	ON	OFF	ON	ON
6	1.5	Heat	100%	Low	316	113.9	75.2	77.0	66.2	----	----	----	---	ON	OFF	ON	ON
7	0.8	Heat	100%	Med	377	131.9	77.9	76.1	68.0	----	----	----	---	ON	OFF	ON	ON
8	0.8	Heat	80%	Low	377	121.1	76.1	76.1	67.1	----	----	----	---	ON	OFF	ON	ON
9	0.8	Heat	100%	High	377	133.7	77.9	77.9	66.2	----	----	----	---	ON	OFF	ON	ON
10	1.5	Heat	100%	Med	316	85.1	77.9	77.0	66.2	----	----	----	---	ON	OFF	ON	ON

Dyna Doctor

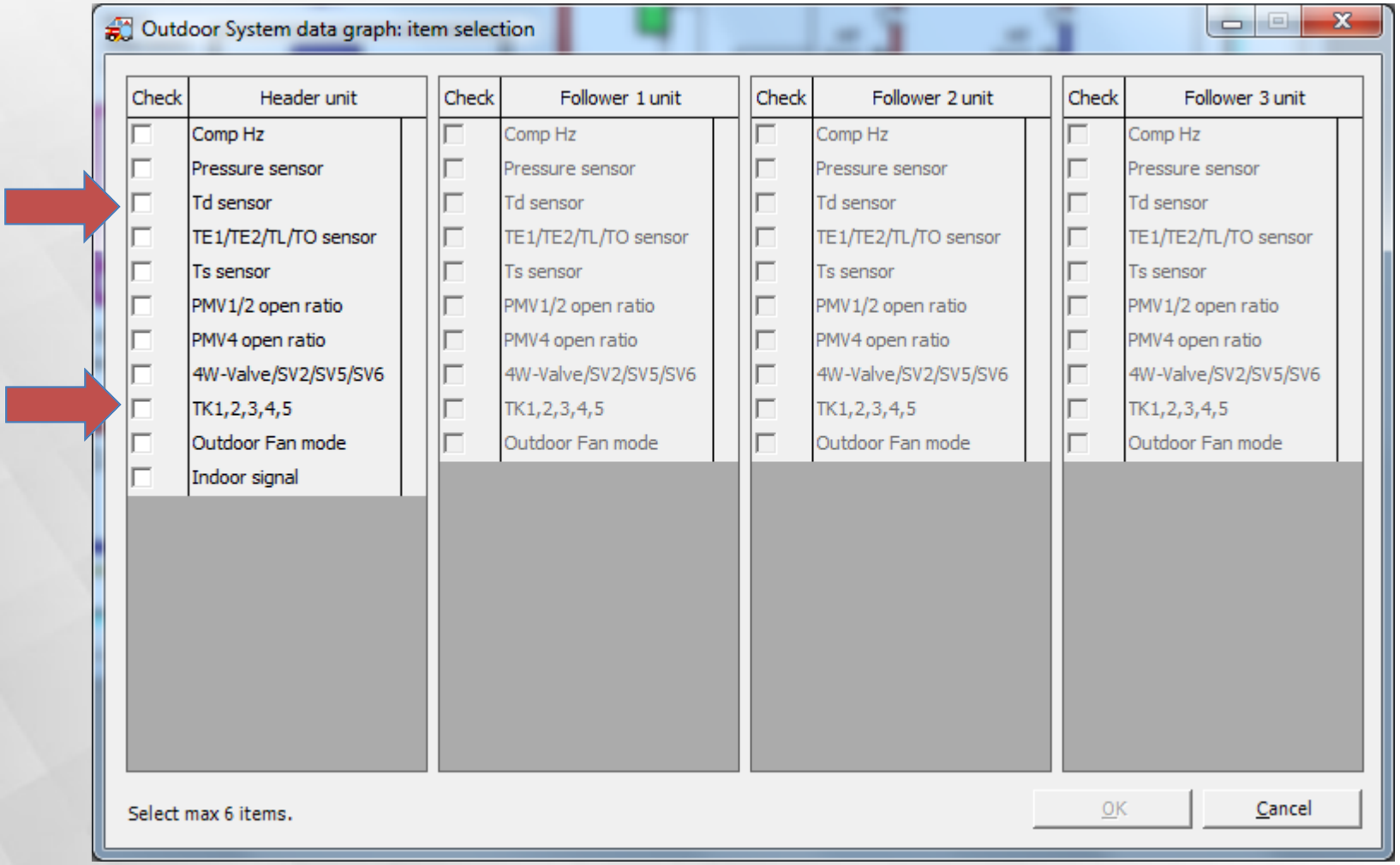
Technical Call

Click Graph. Drop down menu has outdoor or indoor unit.



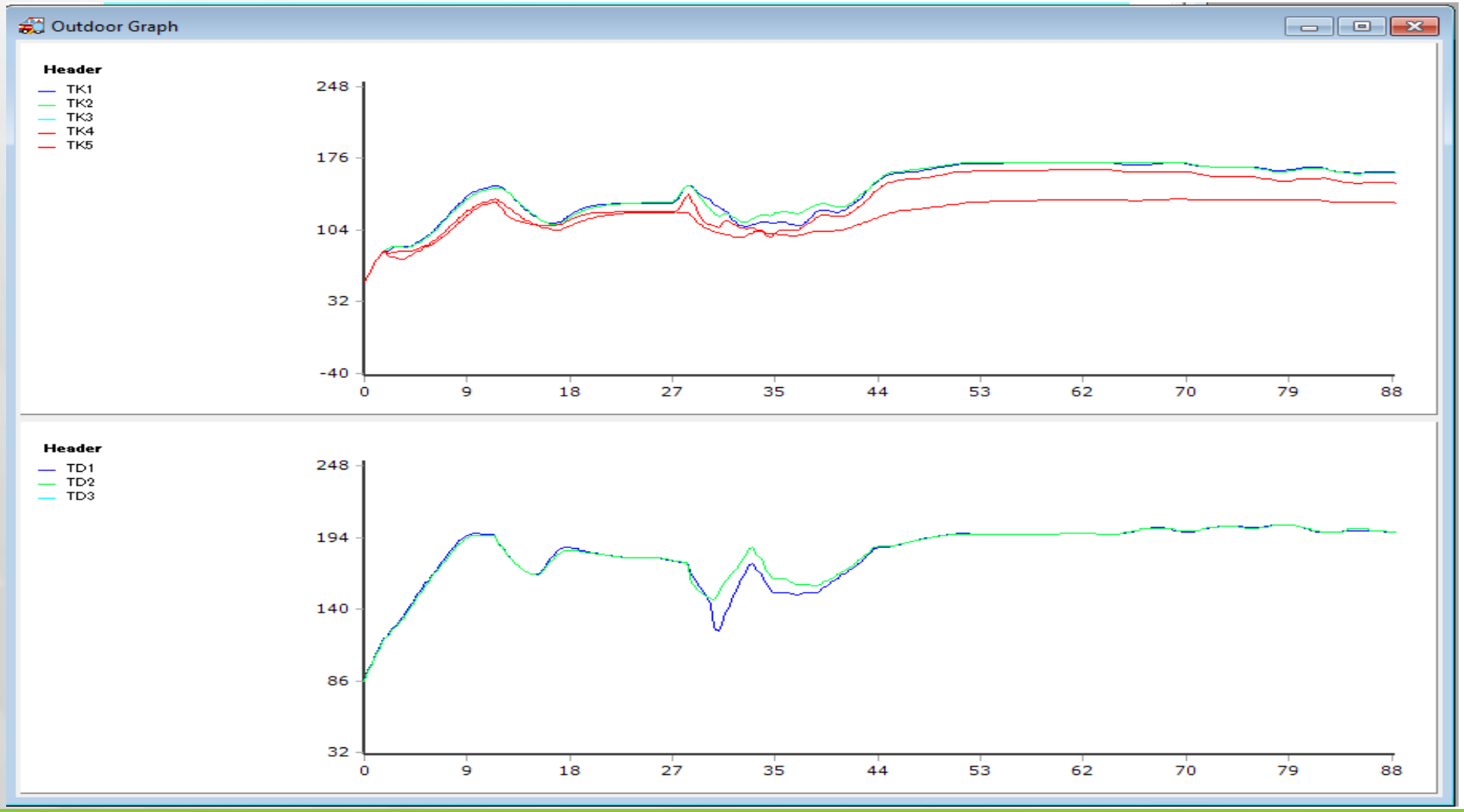
Dyna Doctor

Technical Call



Dyna Doctor

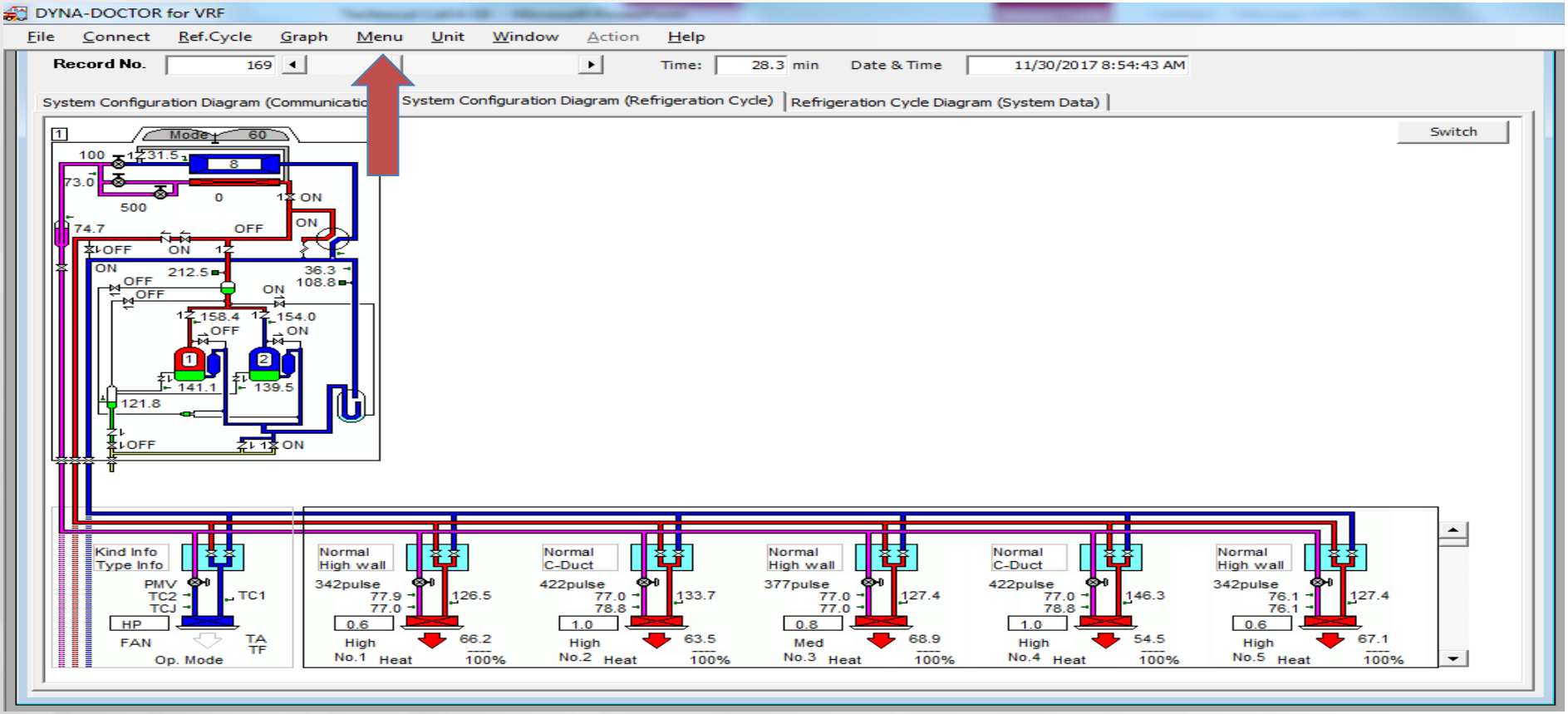
Technical Call



Dyna Doctor

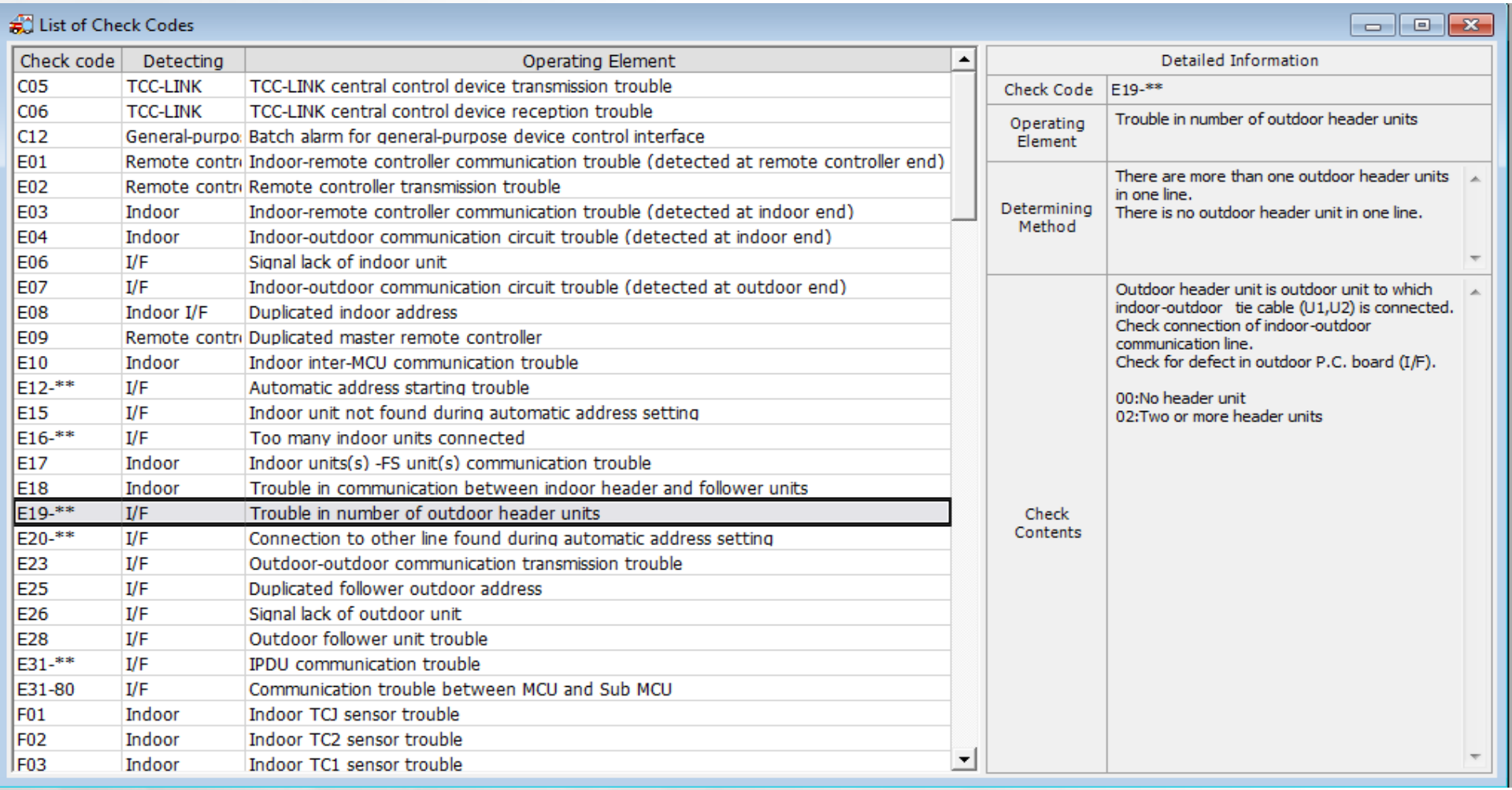
Technical Call

Select Menu. Drop down box appears, choose List Check Codes.



Dyna Doctor

Technical Call



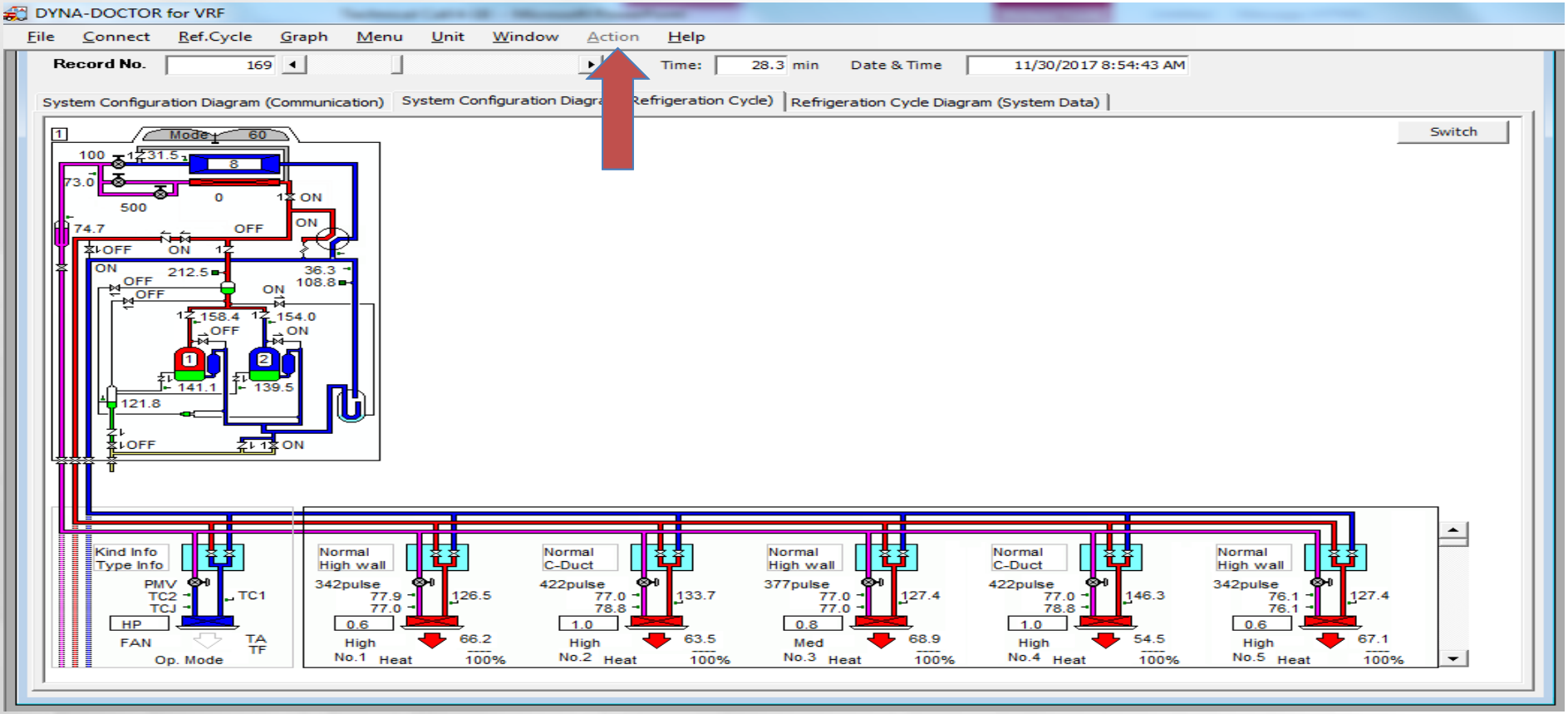
Check code	Detecting	Operating Element
C05	TCC-LINK	TCC-LINK central control device transmission trouble
C06	TCC-LINK	TCC-LINK central control device reception trouble
C12	General-purpo	Batch alarm for general-purpose device control interface
E01	Remote contr	Indoor-remote controller communication trouble (detected at remote controller end)
E02	Remote contr	Remote controller transmission trouble
E03	Indoor	Indoor-remote controller communication trouble (detected at indoor end)
E04	Indoor	Indoor-outdoor communication circuit trouble (detected at indoor end)
E06	I/F	Signal lack of indoor unit
E07	I/F	Indoor-outdoor communication circuit trouble (detected at outdoor end)
E08	Indoor I/F	Duplicated indoor address
E09	Remote contr	Duplicated master remote controller
E10	Indoor	Indoor inter-MCU communication trouble
E12-**	I/F	Automatic address starting trouble
E15	I/F	Indoor unit not found during automatic address setting
E16-**	I/F	Too many indoor units connected
E17	Indoor	Indoor units(s) -FS unit(s) communication trouble
E18	Indoor	Trouble in communication between indoor header and follower units
E19-**	I/F	Trouble in number of outdoor header units
E20-**	I/F	Connection to other line found during automatic address setting
E23	I/F	Outdoor-outdoor communication transmission trouble
E25	I/F	Duplicated follower outdoor address
E26	I/F	Signal lack of outdoor unit
E28	I/F	Outdoor follower unit trouble
E31-**	I/F	IPDU communication trouble
E31-80	I/F	Communication trouble between MCU and Sub MCU
F01	Indoor	Indoor TCJ sensor trouble
F02	Indoor	Indoor TC2 sensor trouble
F03	Indoor	Indoor TC1 sensor trouble

Detailed Information	
Check Code	E19-**
Operating Element	Trouble in number of outdoor header units
Determining Method	There are more than one outdoor header units in one line. There is no outdoor header unit in one line.
Check Contents	Outdoor header unit is outdoor unit to which indoor-outdoor tie cable (U1,U2) is connected. Check connection of indoor-outdoor communication line. Check for defect in outdoor P.C. board (I/F). 00:No header unit 02:Two or more header units

Dyna Doctor

Technical Call

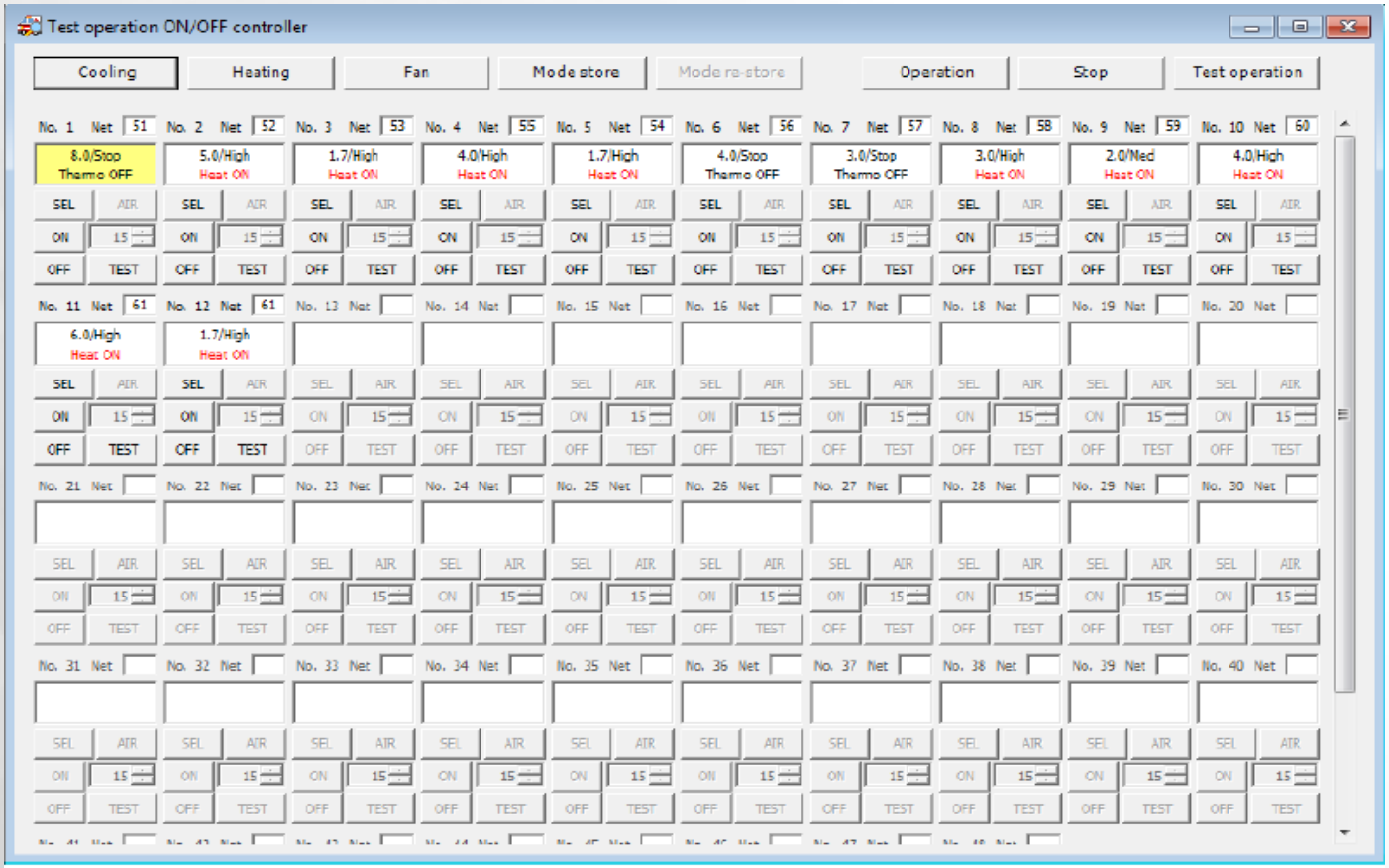
Action button will allow user to control the system from Dyna Doctor. Greyed out here because I am not live.



Dyna Doctor

Technical Call

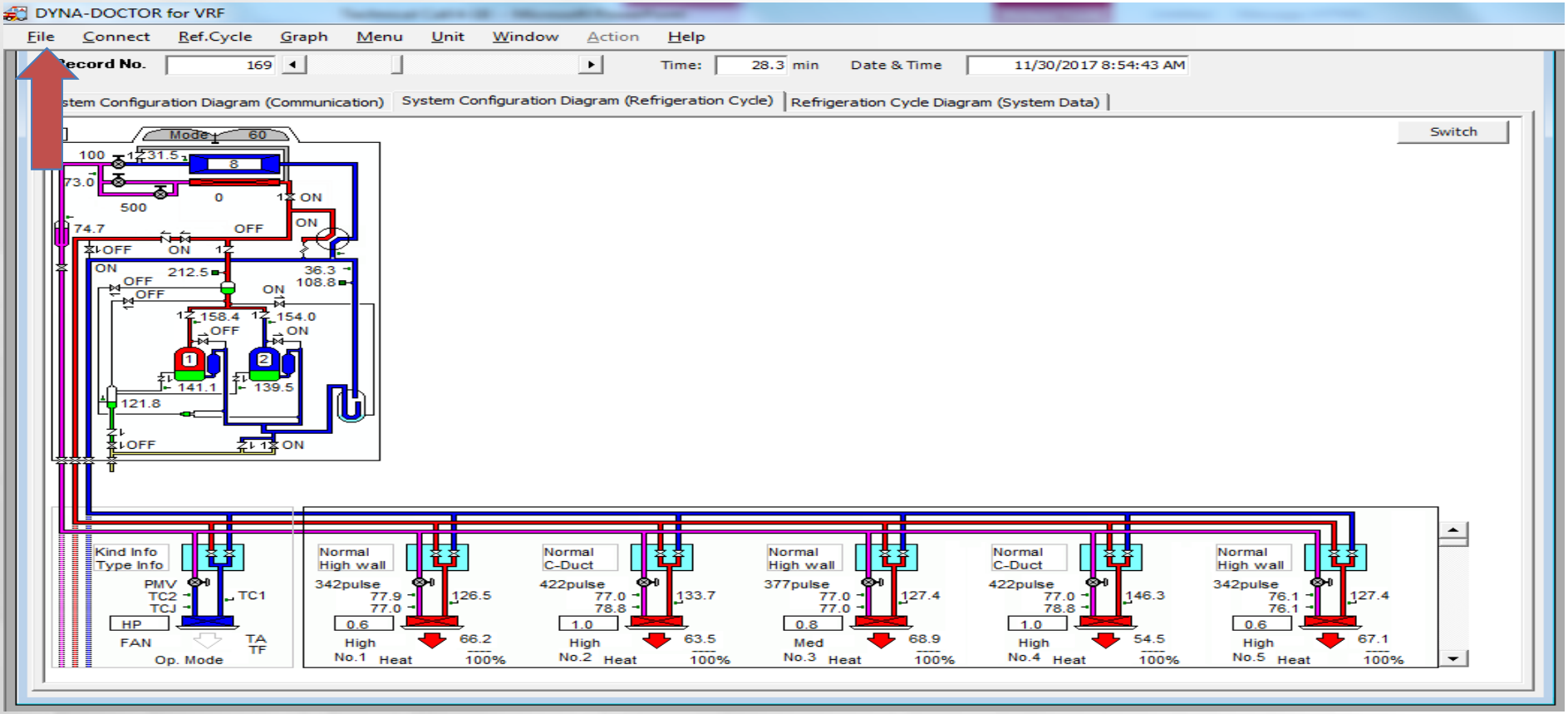
Test runs can be executed from this screen. Select 1 unit or all units.



Dyna Doctor

Technical Call

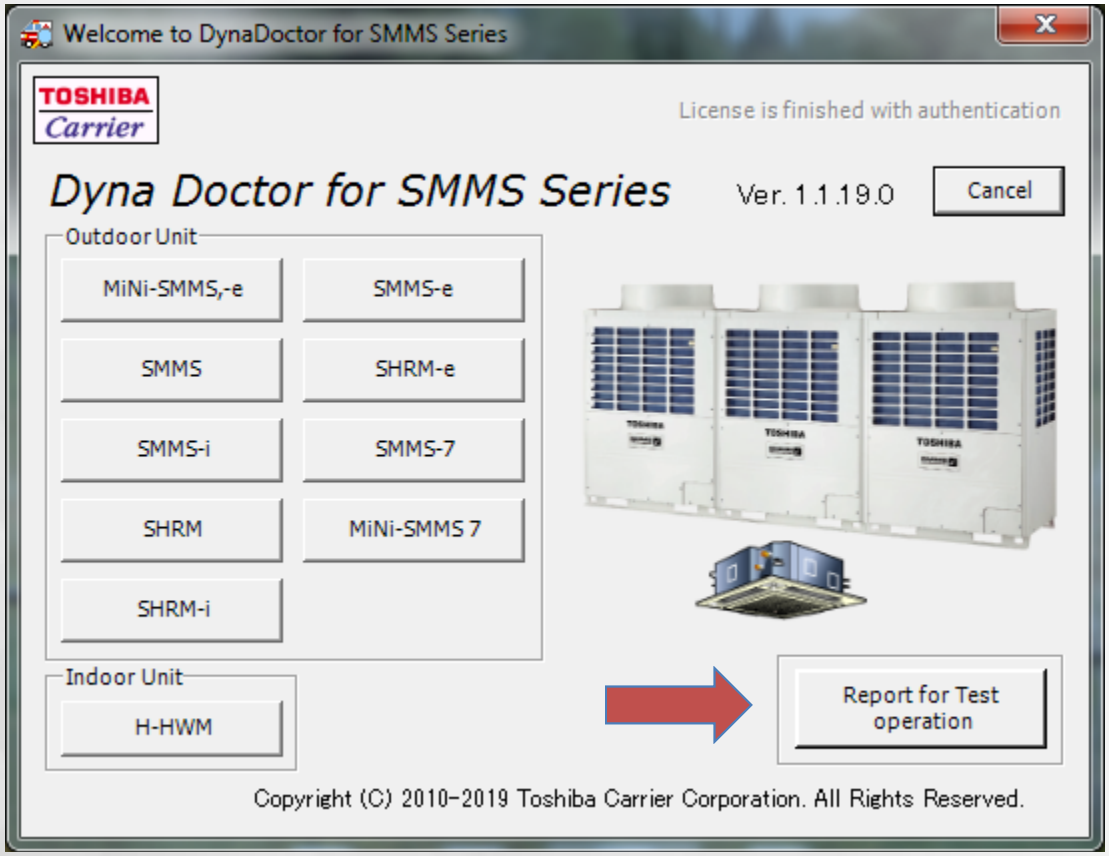
To save a data file click on the File drop down menu and select Save. Follow path to save to a folder. Save early.



Dyna Doctor

Technical Call

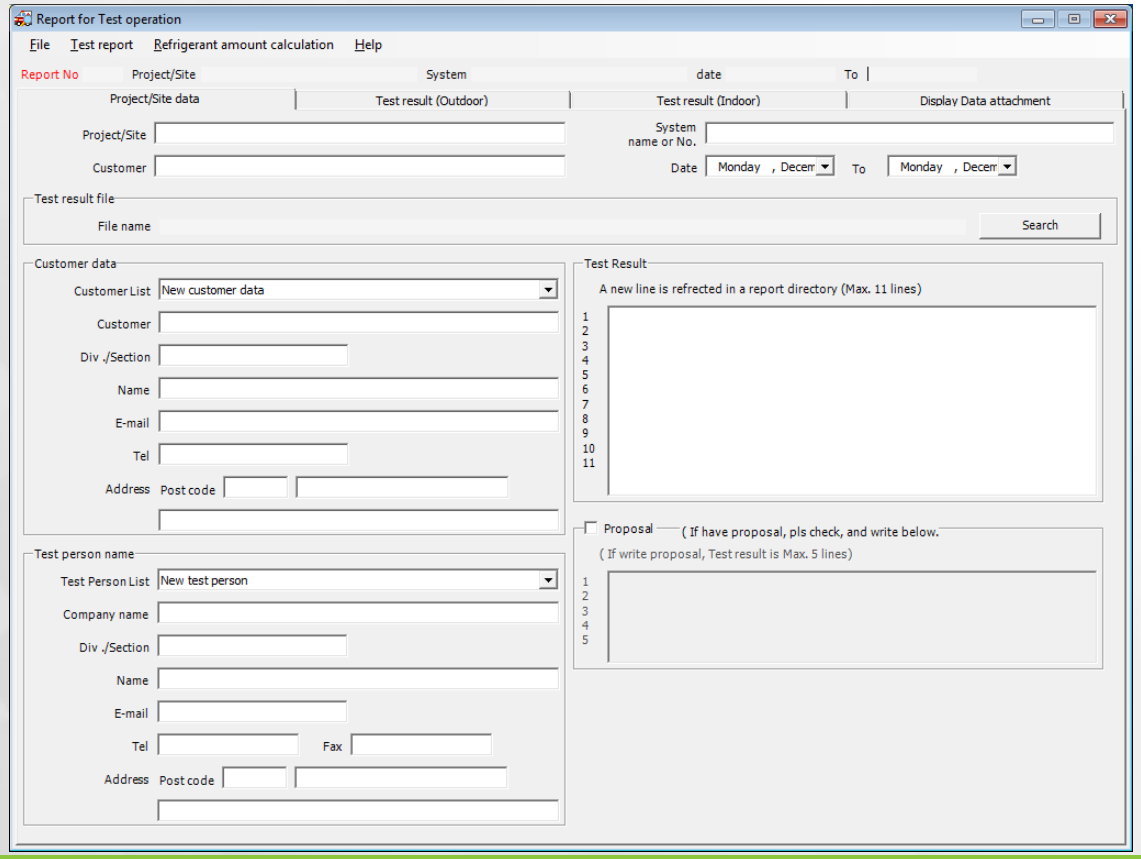
Dyna Doctor can generate a report. Select Report for Test Operation from main screen.



Dyna Doctor

Technical Call

Fill in the data fields and the report can be printed saved exported etc.



Dyna Doctor

Technical Call

Dyna Doctor has an installation manual and a separate operation manual that details all the possibilities for reporting etc. For more information please read these documents.